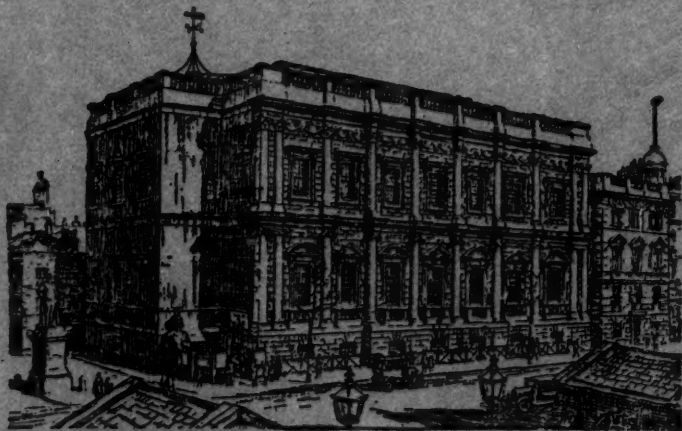


NOVEMBER, 1945



# JOURNAL



## Royal United Service Institution

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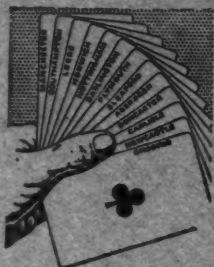
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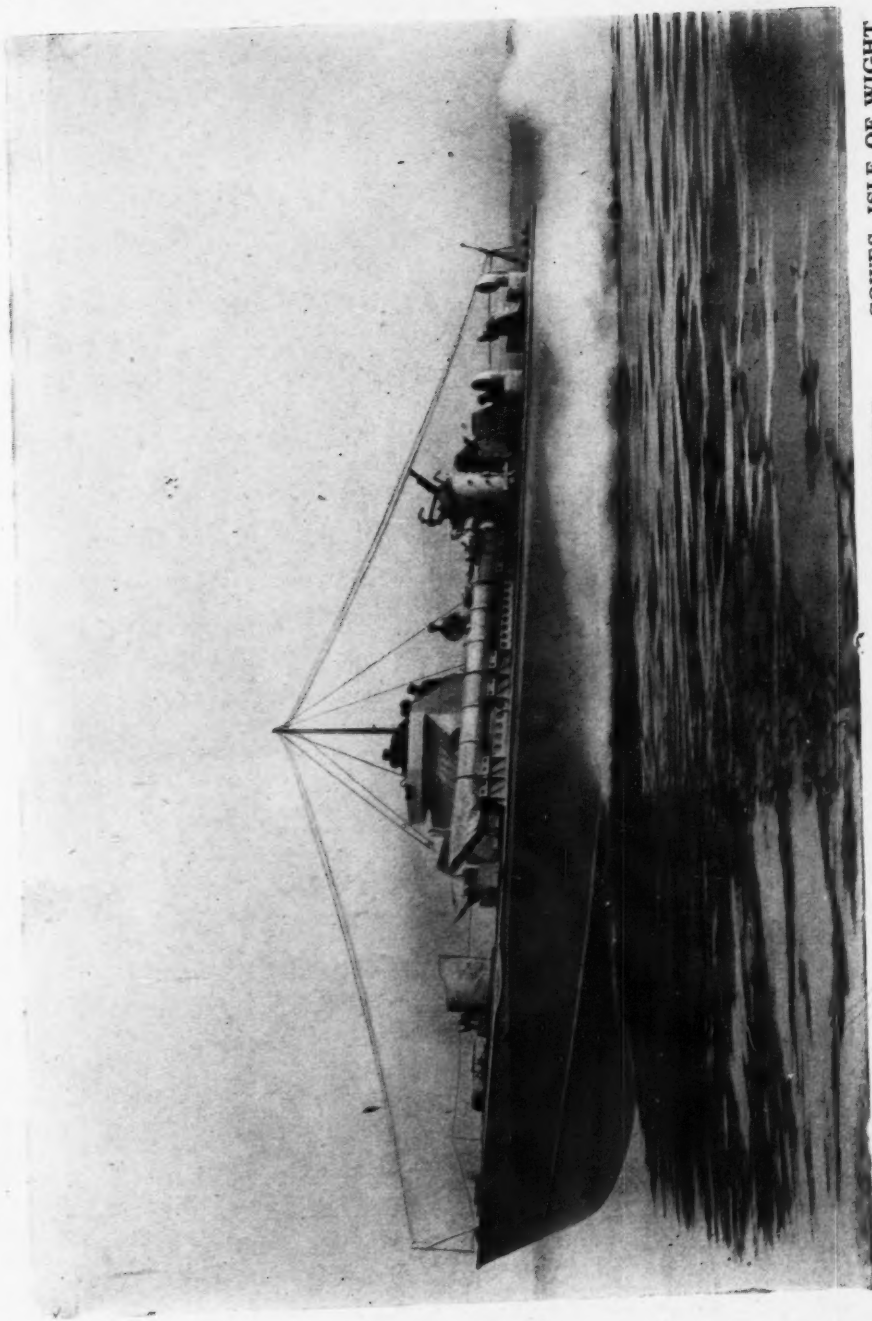
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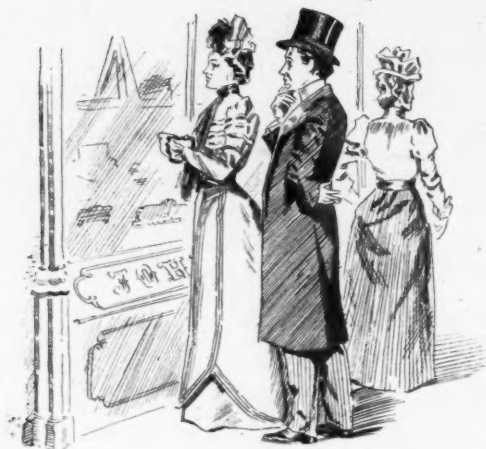


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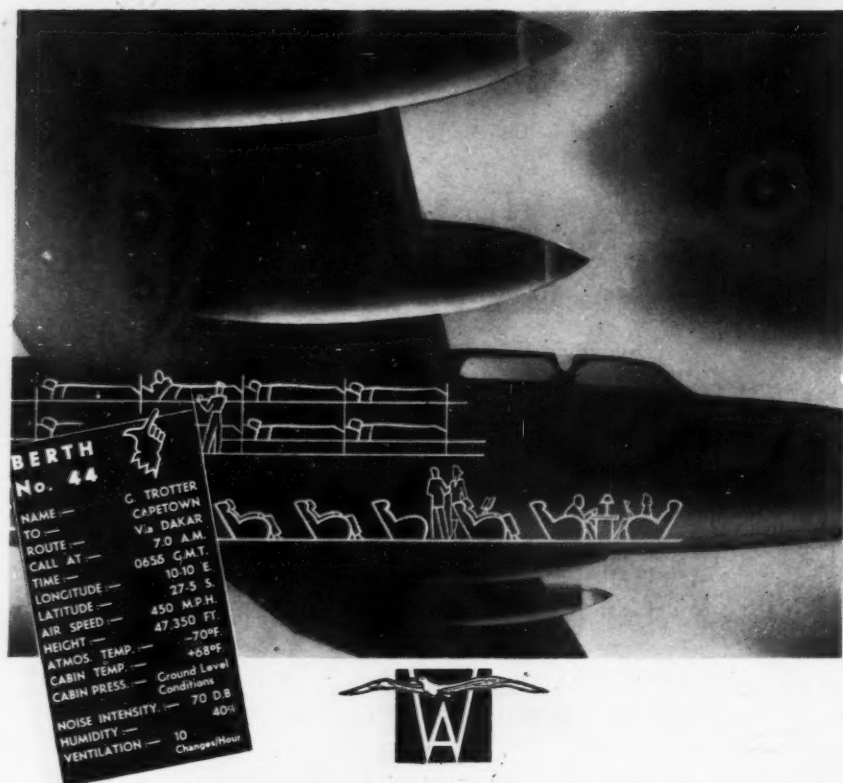


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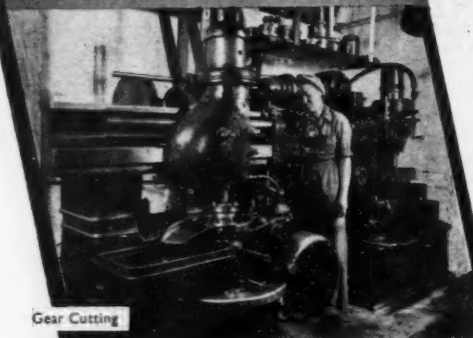
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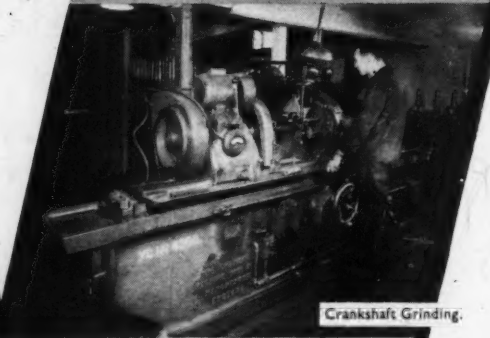
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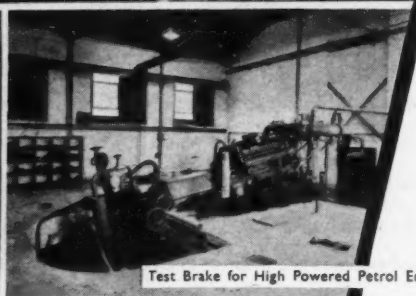
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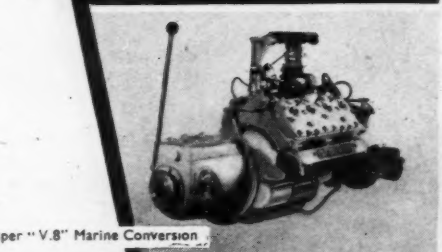
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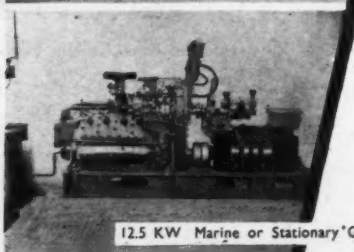
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## SECRETARY'S NOTES

November, 1945.

### ANNIVERSARY MEETING

#### Proposed Alteration to a Bye-law.

The following amendment to the Bye-laws will be proposed by the Council at the Anniversary Meeting to be held on 5th March, 1946

**Composition of Council, Bye-Laws Ch. 3, para. 4, to be amended to read :**

" The Vice-Presidents shall consist of two Naval, four Military and two Air-Force officers . . . . "

Under the existing Bye-laws, there is one Royal Air Force Vice-President.

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### NOTES

1. All subscriptions are due on first joining the Institution and subsequently on 1st January of each succeeding year.
2. The Entrance Fee is temporarily suspended.
3. Members are requested to bring the above particulars to the notice of any officer who may be interested in joining. Details of the facilities afforded by the Institution can be obtained from the Secretary.

## COUNCIL

DEATH OF A FORMER CHAIRMAN.—The Council regret to record the death of their Chairman in 1939—Admiral of the Fleet Sir Frederick Field, G.C.B., K.C.M.G.

## NEW MEMBERS

The following Officers joined the Institution during the period 31st August to 15th November :—

## ROYAL NAVY

Sub-Lieutenant G. C. L. Hadden, R.N.V.R.  
 Commander J. R. Westmacott, R.N.  
 Commander C. H. Pullen, R.N.V.R.  
 Lieutenant-Commander D. R. Webster, R.N.  
 Sub-Lieutenant (A) G. P. N. Deane, R.N.V.R.  
 Surgeon Lieutenant-Commander W. S. Parker, R.N.  
 Captain C. L. Robertson, R.N.  
 Lieutenant (E) T. B. Lanyon, R.N.  
 Major-General A. M. Craig, C.B., O.B.E., Royal Marines.  
 Lieutenant Claud R. G. Robinson, late R.N.V.R.  
 Lieutenant Tempest Hay, R.N.  
 Lieutenant J. N. Devlin, D.S.C., R.N.

## ARMY

Captain F. E. Bowman, 6th Cadet Bn., The Royal Sussex Regiment  
 Captain J. McNaughton, The Cameronians (S.R.)  
 Lieut.-Colonel D. T. Davis, The Royal Sussex Regiment  
 Captain J. D. Hamilton, The Royal Inniskilling Fusiliers  
 Captain P. de L. Bainbrigge, R.A.S.C.  
 Lieut.-Colonel J. B. A. Glennie, D.S.O., The Royal Sussex Regiment  
 Major L. R. Raymond, The King's Regiment  
 Lieut.-Colonel A. W. Reed, R.E.M.E. (T.A.)  
 Brigadier R. H. Hewetson, D.S.O., O.B.E., Royal Artillery  
 Captain D. R. A. Hotchkis, The Cameronians  
 Lieut.-Colonel H. J. Mogg, D.S.O., The Oxfordshire and Buckinghamshire  
 Light Infantry  
 Major L. de Lara, Pioneer Corps  
 Captain J. N. Cowley, 9th Lancers  
 Major E. N. Everett, The King's Own Royal Regiment  
 Major J. S. Mennell, Royal Tank Corps  
 Captain J. F. Ainsworth, The Royal Sussex Regiment  
 Lieut.-Colonel Mohamed Ali Ahmed, 7th Bn. Hyderabad Infantry  
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 Major J. M. Ricketts, 12th Frontier Force Regiment  
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 Major R. R. Crooks, Royal Engineers

Major A. P. Allan, Royal Signals  
 Captain W. E. G. Bagwell, The Royal Norfolk Regiment  
 Major J. H. Hoare, Royal Engineers  
 Lieutenant G. F. Earle, late 13th Hussars  
 Major J. W. Parr, T.A.R.O., Winchester College J.T.C.  
 Major T. E. Jakeman, The King's Own Royal Regiment  
 Colonel P. C. Anderson, D.S.O., M.C., The Seaforth Highlanders (T.A.)  
 Major J. D. Riddick, 1st Derbyshire Cadet Battalion  
 Major A. W. B. Symonds, The Northamptonshire Regiment  
 Captain E. A. F. Howard, The East Surrey Regiment  
 Captain C. L. Pratt, 5th Mahratta Light Infantry, I.A.  
 Lieut.-Colonel D. G. B. Boyd, Royal Engineers  
 Lieutenant B. J. Britain, Royal Artillery

#### ROYAL AIR FORCE

Flight Lieutenant M. G. Milsom, M.C., R.A.F.  
 Wing Commander C. M. Wight-Boycott, D.S.O., R.A.F.  
 Group Captain P. F. Canning, C.B.E., R.A.F.  
 Squadron Leader W. K. Sankey, R.A.F.  
 Flight Lieutenant Rivers Oldmeadow, R.A.F.V.R.  
 Group Captain B. S. Cartmel, R.A.F.  
 Air Marshal Sir Robert H. M. S. Saundby, K.B.E., C.B., M.C., D.F.C., A.F.C.  
 Wing Commander W. E. F. Jennings, O.B.E., R.A.F.V.R.

#### COVENANTED MEMBERS

A total of 344 Members have already adopted the new scheme of Covenanted Subscriptions; 317 as Annual, and 27 as Life Members.

#### Trench Gascolgne Prize Essay, 1945

The following essays have been received :—

"Quinto in Uno."

"You have done your work now and may go  
 play, unless you fall out among yourselves."

"Pax vobiscum."

#### LECTURES

In addition to the Lectures announced in the Secretary's Notes of the August Journal, the following have been arranged :—

January	9th	Air, Land and Sea Warfare	...	Marshal of the Royal Air Force Sir A. Tedder, G.C.B.
"	16th	Russian Convoys	...	Captain I. M. R. Campbell, D.S.O., R.N.
"	30th	The Air Defence of Great Britain		Air Marshal Sir R. Hill, K.C.B., M.C., A.F.C.
February	6th	The Women's Royal Naval Service in the War		Dame Vera Laughton-Matthews, C.B.E.
"	20th	The Development of Tactical Air Forces		Air Marshal Sir A. Coningham, K.C.B., D.S.O., M.C., D.F.C., A.F.C.
March	7th	Science and the Services	...	Professor Sir H. T. Tizard, K.C.B., A.F.C., F.R.S.
"	20th	Behind the Enemy's Lines in Burma		Brigadier B. E. Fergusson, D.S.O.

*All Lectures take place at 3 p.m.*

## CHANGES OF ADDRESS

Members are particularly requested to notify any change of address which will affect the dispatch of their Journals.

## MUSEUM

## War Relics

Members and others interested in the Royal United Service Museum are specially requested to keep a look-out for war relics.

Considerations of space inevitably preclude the acceptance of more than a limited number of small articles or models; but the Council desire to ensure that the Museum shall continue to represent the greatest achievements of the Services, their commanders, officers and men, throughout the ages. Personal relics of special distinction will in future as in the past, be particularly acceptable.

## Additions to the Museum

Amongst recent gifts to the Museum were the following :—

Silver Model of "B 10" Submarine.

Given by K. M. Marshall, Esq.

Levee Dress of the 7th Queen's Own Light Dragoons, 1850.

Given by Mrs. R. M. M. Pedder.

Eagle and Swastika Emblem, formerly in the "Wiechal,"—depot ship of the U-boat flotilla based at Wilhelmshaven and Pillau; now H.M.S. "Royal Rupert."

Given by Captain E. Conder, R.N.

Uniforms of the Royal Flying Corps and Royal Air Force.

Given by the Air Ministry.

Equestrian Statuette in bronze of Field-Marshal Earl Roberts, V.C., K.G., K.P., G.C.B., O.M., G.C.S.I., G.C.I.E., V.D.

Given by Colonel F. D. Samuel, C.B.E., D.S.O., T.D.

(a) First British Flag to be hoisted in Berlin; raised, on 4th July, 1945—the day of entry of the British troops, over Major-General Lynes' headquarters.

(b) Collection of personal messages issued to his Command by Field-Marshal Sir Bernard Montgomery during the Campaigns in North Africa and N.W. Europe.

(c) Reproduction of his Visitors' Book with comments by Mr. Churchill.

(d) Small Union Flag flown on Field-Marshal Sir Bernard Montgomery's car during the campaign in N.W. Europe, 1944-45.

All given by Field-Marshal Sir Bernard Montgomery, G.C.B., D.S.O.

Joystick of the Gladiator Aircraft "Faith," sole survivor of the three old biplanes which were the only fighter protection for Malta during the first heavy Italian air attacks in 1940.

Given by Air Vice Marshal K. B. Lloyd, C.B.E., R.F.C.

Models of the following naval aircraft :—

Seafire, Wildcat III, Barracuda (scale 1/24th).

Given by the Admiralty.

Two stands of old Colours of the 1st and 2nd Battalions, The Royal Dublin Fusiliers. Transferred from Bagshot Park Museum and deposited by the Officers of the Royal Dublin Fusiliers.

Two full-dress Colour-belts of the 2nd Battalion, The Royal Dublin Fusiliers.

Deposited by the Officers of the Royal Dublin Fusiliers.

Court Sword, believed to have been the property of Rear-Admiral Richard Kempenfelt, who lost his life in the "Royal George" in 1782.

Given by Mr. John Troughton.

Electric lamp-fitting used in the 5.9-in. concealed gun batteries of the German raider "Nordmark."

Given by Captain E. W. Swan, O.B.E., V.D., R.N.V.R.





THE COMMANDER-IN-CHIEF 21st ARMY GROUP

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# **THE JOURNAL**

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## **Royal United Service Institution**

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[Authors alone are responsible for the contents of their respective Papers.  
All communications, except those for perusal by the Editor only, should  
be addressed to the Secretary, Royal United Service Institution.]

### **21st (BRITISH) ARMY GROUP IN THE CAMPAIGN IN NORTH-WEST EUROPE, 1944-45**

By FIELD-MARSHAL SIR BERNARD L. MONTGOMERY, G.C.B., D.S.O.

On Wednesday, 3rd October, 1945

FIELD-MARSHAL SIR ALAN F. BROOKE, G.C.B., D.S.O., in the Chair.

THE CHAIRMAN: Field-Marshal Montgomery needs no introduction and therefore we will not waste time. The only thing I should like to tell you is that as his lecture is a very full one, there will not be time for any discussion

#### **LECTURE**

#### **I**

**I**T is essential to begin by saying that in modern war every operation is combined; no single Service completely predominates all the time. In the initial stages of this campaign the object was to secure a lodgment on the Continent from which further offensive operations could be developed; this was clearly a combined operation of the first magnitude.

Before the operation was launched it was the task of the Air Forces to create conditions favourable to a successful landing and to the subsequent development of operations inland. Both the Army and the Navy relied on this being done, and it was done; the heavy bombers of Bomber Command and of the American Air Force did magnificent work in weakening Germany generally, and in particular in destroying the enemy railway system, which enormously reduced the mobility of the enemy once operations began.

Until the Army stepped ashore it was completely in the hands of the Navy and Air Forces for its sea and airborne landings.

Once the Army was on shore all military operations became combined Army/Air operations; the mighty weapon of air power enabled the Army to conduct its operations successfully and with far fewer casualties than would otherwise have been the case. The Army relied on the Navy and on the Air Forces for secure communications across the sea from our island base in Britain.

As a soldier I would like to say that the Army owes a great debt of gratitude to the Navy and the Air Force and realizes fully its complete dependence on them in all military operations. I feel certain that sailors and airmen will agree that the

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contribution of the Army to the successful conclusion of the German war was up to standard.

This campaign involved the whole problem of the conduct of offensive operations on land in Western Europe with the final object of destroying the enemy's armed forces and occupying Germany. The Army had got to carry out this task; it is obvious that no other Service could do it.

Therefore the first need was to decide how the operations on land were to be developed so that the object could be attained in the simplest and quickest way. It was then for the Navy to say whether the Army could be put on shore in such a way that the land battles could be developed in the required manner; and it was for the Air Force to say whether this would suit the air plan. And so the combined plan was built up; some compromise was necessary and this will always be the case; but eventually, and very quickly, an agreed plan emerged.

Before passing on to describe the plan and the operations, I must pay tribute to the splendid teamwork that was built up by the Allies in this campaign. Under the Supreme Commander, General Eisenhower, the various components of the great force involved were welded into a fine fighting machine. "Allied Solidarity" was the keynote of our policy, and it was achieved in no uncertain manner.

From now on I shall confine myself to the purely military side of the campaign, and I should like to remind you that in relating the action of the soldiers, I speak not only of the American, British and Canadian forces, but also of the contingents of Belgians, French, Dutch, Poles, Czechs and other Nationals which were included in the 21st Army Group, all of whom played their part with distinction.

#### THE PLAN

The intention was to assault, simultaneously, beaches on the Normandy coast immediately North of the Carentan estuary and between the Carentan estuary and the River Orne, with the object of securing as a base for further operations a lodgment area which was to include airfield sites and the port of Cherbourg. The left or eastern flank of the lodgment area was to include the road centre of Caen.

General Eisenhower had placed me in command of all the land forces, British and American; I was in fact his land force commander.

Once ashore and firmly established, my plan was to threaten to break out on the eastern flank—that is in the Caen sector; by this threat to draw the main enemy reserves into that sector, to fight them there and keep them there, using the British and Canadian armies for the purpose. Having got the main enemy reserves committed on the *eastern* flank, my plan was to make the break-out on the *western* flank, using for this task the American armies under General Bradley, and pivoting on Caen; this attack was to be delivered southwards down to the Loire and then to proceed eastwards in a wide sweep up to the Seine about Paris. This would cut off all the enemy forces South of the Seine, over which river the bridges were to be destroyed by air action. The general plan was given out by me to the General Officers of the field armies in London in March, 1944—that is, three months before D Day. The operations developed in June, July and August exactly as planned. I had given D + 90 as a target date for being lined up on the Seine; actually the first crossing of the river was made on D + 75.

Why did we select the Normandy beaches? They offered a better shelter for shipping and were less heavily defended than other possible beach areas along the

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See Map at end of Lecture.

Channel coast. They satisfied the minimum requirements of the Air Forces, in terms of their distance from home bases, for the provision of air cover. The absence of major ports was overcome by the gigantic engineering feat of constructing two artificial ports in the United Kingdom which were towed across the Channel in sections and erected, one in the United States sector and one in the British sector. In spite of considerable damage during the unprecedented June gale, the port at Arromanches in particular proved a great success.

The invasion operations may be said to have begun with the action of the Air Forces. The first stage was the winning of the air battle, an essential preliminary always to all major offensive operations. This task was admirably accomplished. As D Day drew nearer, attacks were delivered against coast defences along the whole length of the Atlantic Wall. Meanwhile, prevention of enemy air reconnaissance during the period of concentration of the invasion forces was highly successful, and contributed towards the gaining of tactical surprise. Naval operations were intensified against E-boats and U-boats as the great day approached.

#### THE ASSAULT

My plan of assault, as approved by the Supreme Commander, provided for simultaneous landings by eight equivalent brigades—of which three were British and two were Canadian brigades, and three were American combat teams. With the assaulting brigades, two battalions of U.S. Rangers and portions of two British commando brigades took part. The Americans assaulted on the right flank as they would ultimately require direct entry of personnel and stores from the Atlantic.

Airborne forces were used on both flanks. On the right, the 82nd and 101st U.S. Airborne Divisions dropped at the base of the Cotentin peninsula to assist in capturing the beaches and isolating Cherbourg. The 6th British Airborne Division was given the task of seizing the crossings over the Caen Canal and of operating on our extreme left.

The first task of General Bradley's forces was to cut off the Cotentin peninsula and seize Cherbourg. Operations would then develop southwards. The British forces, under General Dempsey, were to make straight for Caen to establish the pivot.

It is important to mention the subject of build-up. I considered it essential for the success of initial operations to have ashore and ready for action by the end of D + 3, seven divisions together with the necessary proportion of armour, quite apart from the airborne troops. With these forces I was confident of being able to defeat the first German attempts to dislodge our forces and also of being able to retain the initiative.

#### THE BATTLE OF NORMANDY

The assault on the beaches of Normandy began on 6th June, 1944. Airborne forces were dropped first; then from a mighty armada of ships and craft, preceded by a tremendous weight of bombing from the air, American, British and Canadian troops set foot again in France.

Despite the enemy's plan to defeat us on the beaches, there were no surprises awaiting us, and our measures for overcoming the formidable array of obstacles and beach defences were effective. The secrecy of our operations, and the special measures taken to mislead the enemy, had achieved a great measure of tactical surprise—and in the circumstances we could not hope for more. Moreover, our losses were lighter than we had expected.

Within a week the beachheads had successfully linked up, and along the continuous front Allied troops were engaged in heavy fighting in the difficult *bocage* country. Adequate stocks of ammunition and supplies had been accumulated, and our build-up was proceeding well. We had gained a strong foothold; we had suffered no setbacks; we had maintained the initiative.

Having first isolated the enemy forces covering Cherbourg by a thrust across the base of the Cotentin peninsula through St. Sauveur, the Americans turned North to deal with Cherbourg. The port was captured on 26th June.

Meanwhile, the Second British Army was continuously engaged in fierce fighting round Caen, where the bulk of the enemy armour was committed. By the end of June there were six Panzer divisions involved on our eastern flank with a further Panzer division expected.

#### THE BREAK OUT

In early July, the First U.S. Army was gaining position for the break-out from the initial lodgment area. Operations centred in the La Haye du Puits sector and in the capture of St. Lo. Meanwhile, the business of locking up the enemy armour on the eastern flank continued.

Preceded by a highly successful bomber raid, when for the first time aircraft of Bomber Command operated on the tactical battlefield, we entered Caen on 9th July. In order to increase the enemy's anxiety in this sector by threatening armoured action in the open country South-East of Caen, I now withdrew three armoured divisions into reserve. The enemy responded suitably; the bulk of his armour remained where we wanted it.

The Second British Army now extended its front farther West in the Caumont sector in order to increase the striking force available to the First U.S. Army. The First Canadian Army (under General Crerar) took over responsibility for the extreme left sector on 23rd July. The stage was thus set for the break-out from the western flank.

On 25th July the main American attack started in the sector between Periers and St. Lo. The Eighth U.S. Air Force was employed in the tactical role and dropped a carpet of bombs immediately in front of the leading troops as a preliminary to their advance. The advance was highly successful; Avranches was taken on 30th July. The VIII U.S. Corps, under command of Headquarters Third U.S. Army (General Patton), was then directed into the Brittany peninsula. With the entry into the field of the Third U.S. Army, Headquarters Twelfth U.S. Army Group (General Omar Bradley) assumed command of both American armies. The Twelfth U.S. Army Group remained under my operational control.

The enemy was trying to recover his balance as the powerful American attack pushed back his left flank and began to swing South-East and East. He tried to stabilize a front on "hinges" at Caumont, on the Orne, and on the high ground between Caen and Falaise. One by one the hinges, or "key rivets," were successively knocked out by the British armies working from West to East as the attack of the American armies on the West flank gathered momentum.

By 6th August the area Laval-Mayenne-Domfront had been reached and on the following day the First Canadian Army, which had now extended its front to include the Caen sector, began a series of major attacks astride the Caen-Falaise road.

This was an exciting time, as it was now to become apparent whether the enemy would stand and be defeated between the Seine and the Loire or whether he would endeavour to withdraw his forces behind the Seine. Between 7th and 11th August it became clear that he had decided to fight the Battle of France on our side of the Seine. On the 7th a major counter-attack employing up to six armoured divisions was launched on Hitler's orders against the American forces in the area of Mortain. It was designed to cut off the forces operating South of Avranches by a drive to the sea. In the face of this counter-attack the Americans, assisted by the full weight of the tactical air forces, stood firm.

I ordered the right flank of the Twelfth U.S. Army Group to swing North towards Argentan, and intensified the British and Canadian thrusts southwards to the capture of Falaise. It had become a race to trap the German forces deployed in the long salient between Falaise and Mortain. Meanwhile, the enemy received a tremendous hammering from the air.

Falaise fell to the Canadian Army on 16th August; American forces had reached Argentan, and fighting of tremendous intensity was in progress at the bottleneck with the German striving all he knew to force his way out.

Speedy regrouping on the Twelfth U.S. Army Group front, combined with outstanding administrative improvisation, enabled the advance eastwards of the Third U.S. Army to continue *while the battle of the Falaise pocket was still in progress*. By 20th August, troops of General Patton's army reached and crossed the Seine in the area of Mantes and began to work westwards along the river towards Elbeuf. While American, Canadian, French and Polish troops held the neck of the bottle, the Second British Army and First U.S. Army, strongly supported by the tactical air forces, overran and eliminated the trapped enemy. The other armies of the 21st Army Group then began the race to the Seine. They quickly reached their sectors on the river; tremendous execution was done by the Air Forces, particularly at the Rouen ferries.

#### THE ENEMY SITUATION AFTER THE BATTLE OF NORMANDY

Here I will pause for a moment to discuss the enemy situation as a result of the Battle of Normandy. The losses sustained by the Germans were truly tremendous. Of his Army, Corps and Divisional commanders, twenty had been killed or captured and two others wounded. The supreme German commander had been changed twice. Of his fighting troops, forty-three divisions had either been eliminated or very severely mauled, apart from those locked up in Brittany and the Channel Islands. His losses in killed, wounded and prisoners were not far short of half a million men. His material losses were equally severe; some fifteen hundred tanks were destroyed and three thousand five hundred guns were either destroyed or captured.

The Battle of Normandy had conformed to the pattern decided upon before D Day. There was nothing the enemy had been able to do which ever upset this plan, and there was never a moment in which we had not firmly held the initiative. The massive counter-attack which we had always taken into consideration in our plans before the invasion never materialized in the earlier stages. He had been forced to use his Panzer formations to plug holes in the line in response to our thrusts. He was not able to launch a main stroke with them until after we had broken out of our original bridgehead. It was then too late. It is interesting to notice from Map 1 that the operations had developed to the schedule we had drawn up.

## THE DRIVE ACROSS THE PAS DE CALAIS TO ANTWERP

On 1st September the Supreme Commander assumed command and direction of the Army Groups himself, and I was no longer, therefore, his overall land force commander. From now on my story will be primarily concerned with the 21st Army Group proper, that is, with the British and Canadian forces, together with the various Allied contingents which served with them.

In considering the development of the strategic plan after crossing the Seine the primary object, of course, was the destruction of the German Army. As a result of discussions between the Supreme Commander and myself, from now on the eventual mission of the 21st Army Group became the isolation of the Ruhr. The urgent problem was to prevent the enemy's recovery from the disaster sustained in Normandy. A major consideration was the administrative situation created by our ever-lengthening lines of communication. My administrative staff had, however, been building up reserves during August in order to support the pursuit. Imports were cut by 60 per cent. in order to release a considerable quantity of transport from beach and port clearance for forward maintenance purposes.

The immediate tasks of the 21st Army Group were :—

- (a) the destruction of the enemy in North-East France,
- (b) the clearance of the Pas de Calais with its V-bomb sites,
- (c) the capture of airfields in Belgium, and
- (d) the capture of Antwerp.

Between 25th and 30th August, the Second British Army and First Canadian Army crossed the Seine, in most cases without serious opposition. The four Allied armies now started advances which were eventually to bring them to the Rhine on a very broad front.

On the right the Third U.S. Army, having concentrated East of Paris (which was liberated on 25th August), was striking eastwards during the first week of September to Nancy and Verdun. Shortly afterwards another column was directed South-East towards the Belfort area to join up with the Seventh U.S. Army approaching from Marseilles.

The First U.S. Army advanced over the Aisne with its right flank directed on the Duchy of Luxembourg and its left flank on the general axis Mons-Liege.

The Second British Army advanced North-East on Central Belgium, while the First Canadian Army was about to sweep up the Channel coast.

The 30th Corps was the spearhead of the British drive to the North. Amiens was reached on 31st August, Brussels was entered on 3rd September, and the city of Antwerp on the following day. This advance imposed a considerable strain on administration. We were maintaining our spearheads some four hundred miles from the temporary base in Normandy. The greatest strain was thrown on road transport, because only short stretches of railway were available owing to the widespread demolitions. But all difficulties were overcome, and the pace of the pursuit was maintained.

## DECISION TO SEIZE A BRIDGEHEAD OVER THE MEUSE AND RHINE AND CLEARANCE OF THE SCHELDT ESTUARY

The speed of our advance through the Pas de Calais and into Belgium convinced me that if the Allies could concentrate and maintain sufficient strength for the task, one powerful and full-blooded thrust deep into Germany would overwhelm

the enemy and carry with it decisive results. The best axis along which such a thrust could have been developed was the route North of the Ruhr leading to the plains of Northern Germany. It was obvious that the enemy would concentrate strong forces to defend this vital axis, and the industrial area of the Ruhr.

Speed was essential. The stroke could be effective only if carried out at once, taking advantage of the disorganized state of the enemy; moreover, weather conditions would inevitably deteriorate from mid-September onwards and handicap the use of our air power and our airborne forces. But we would have to be strong enough on the selected axis to get decisive results quickly.

Could sufficient troops be made available, and could our maintenance resources sustain them on such long lines of communication? If so, the end of the War was in sight.

The Supreme Commander came to the decision that we should not at this stage stick out our neck in one single thrust deep into enemy territory, owing to our lack of major deep-water ports. The lines of communication still stretched to the Normandy beaches and Cherbourg peninsula, and the Autumn weather was close upon us. He therefore decided that the early opening up of deep-water ports and the improvement of our maintenance facilities were pre-requisites to the final assault on Germany proper. He directed that our immediate aim should be the establishment of bridges over the Rhine throughout its entire length, and that we should not go beyond this until Antwerp or Rotterdam could be opened. In view of the time factor it was agreed that the 21st Army Group should launch its thrust to the Rhine before completing the clearance of the Scheldt estuary.

I ordered the resumption of the Second Army advance from the Antwerp-Brussels area for 6th September, and by 11th September a bridgehead was established over the Meuse-Escaut Canal. It was already noticeable that the enemy was beginning to recover his balance, so that the urgency of launching the thrust to the Rhine was underlined.

On Sunday, 17th September, the Battle of Arnhem began. The purpose was to cross the Meuse and the Rhine and place the Second Army in a suitable position for the subsequent development of operations towards the northern face of the Ruhr and the North German plains. The thrust to Arnhem outflanked the northern extension of the West Wall, and came very near to complete success.

The essential feature of the plan was the laying of a carpet of airborne troops across the waterways from the Meuse-Escaut Canal to the Neder Rijn, on the general axis of the road through Eindhoven to Uden, Grave, Nijmegen and Arnhem. The airborne carpet and bridgehead forces were provided by two American and one British airborne divisions and a Polish parachute brigade. Along the corridor, or airborne carpet, the 30th British Corps was to advance and establish itself North of the Neder Rijn with bridgeheads over the Ijssel facing East. From the start, however, adverse weather conditions prevailed, and indeed, during the eight vital days of the battle, there were only two on which the weather permitted even a reasonable scale of offensive air support and air transportation. As a result, the airborne formations were not completed to strength (indeed, the 82nd Airborne Division was without a complete glider-borne combat team). It had moreover been the intention to fly in the 52nd Division, but this project had to be abandoned. Re-supply missions were repeatedly cancelled, and when flown were often on a greatly reduced scale. Had reasonable weather conditions obtained, I believe that the Arnhem bridgehead would have been established and maintained.

Full success at Arnhem was denied us for two reasons. First, the weather prevented the building up of adequate forces in the vital area. Second, the enemy managed to effect a very rapid concentration of forces to oppose us, and particularly against the bridgehead over the Neder Rijn. In face of this resistance the British group of armies in the North was not strong enough to retrieve the situation created by the weather by intensifying the speed of operations on the ground. We had not the divisions to widen the corridor sufficiently quickly to reinforce Arnhem by road.

On 25th September I ordered withdrawal of the gallant Arnhem bridgehead. We retained the vital crossings at Grave and Nijmegen, and their importance was to be amply demonstrated.

On the central sector of the Allied front, by the middle of September, the First and Third U.S. Armies were fighting on the Siegfried Line from the Aachen area through the Ardennes to the region of Trier and southwards along the general line of the upper Moselle. By the third week in September the Sixth U.S. Army Group which had landed at Marseilles was firmly deployed on the right of the Twelfth U.S. Army Group and the Allied front was continuous to Switzerland.

We had moved eastwards towards the Rhine on a broad front, but had been halted. We had gained great successes, but had been nowhere strong enough to gain decisive results quickly.

#### OPERATIONS TO OPEN UP ANTWERP

The enemy had achieved a measure of recovery. This was clear not only in the Arnhem operation, but also in his reaction to American thrusts in the Siegfried Line. We had to prepare for a hard killing match before we could secure the Ruhr and advance into Germany. We had also to open the approaches to Antwerp before Winter set in. The immediate intention therefore became the clearance of the Scheldt estuary.

This task was given to the First Canadian Army and lasted through October to the first week in November. The enemy resistance was vigorous, and some very hard fighting took place, leading up to the final operation for the capture of Walcheren. The reduction of this fortress presented many novel problems. These were overcome principally by very remarkable precision bombing by Bomber Command, which breached the dykes and submerged large areas of the island. The extensive use of special amphibious devices enabled our troops to operate in the resulting floods. The naval craft put up a very fine performance in this battle in spite of severe casualties from the coast defences and the rough seas.

#### PREPARATIONS FOR THE BATTLE OF THE RHINELAND

As the Antwerp operations were progressing, I was busy considering re-grouping for the next major battle which would precede the capture of the Ruhr. I had hoped to launch an offensive some time in the late Autumn to clear the area between the Meuse and the Rhine, but it was necessary first to clean up the considerable enemy forces which remained West of the Meuse, particularly in the Venlo area. We were not strong enough to do this and at the same time undertake a major thrust between the rivers.

This phase I call "the preparations for the battle of the Rhineland"—I refer here, and throughout my lecture, to that part of the Rhineland falling in the 21st Army Group zone. These operations enabled us to economize forces by basing the front

on the Meuse obstacle, and ensured a friendly western flank for the battle to follow. The weather was often appalling, and the fighting took place in difficult country against a very tenacious enemy. But by early December the Second British Army was lined up along the River Meuse as far South as Maeseyck, whence the front crossed the river to the area of Geilenkirchen and joined the Ninth U.S. Army.

To facilitate the Second Army operations, I transferred the responsibility for the Nijmegen bridgehead to the Canadian Army on completion of the Scheldt operations. This re-grouping had a further object: the First Canadian Army was required to plan the battle of the Rhineland which was to be launched from the Nijmegen area; the Second British Army was to plan the subsequent assault across the Rhine.

While these plans were maturing, the enemy, too, was busy. The severe attrition he had experienced during the past two months had not prevented the re-equipment of his strategic reserve. The Sixth S.S. Panzer Army was ready for battle.

Plans for the re-grouping of the 21st Army Group for the battle of the Rhineland were completed by early December. We had reached the stage when some divisions were actually on the move to their new concentration areas when, on 16th December, the German counter-offensive in the Ardennes broke. Our plans were postponed.

#### THE BATTLE OF THE ARDENNES

The full weight of the German counter-offensive in the Ardennes was not immediately apparent. Extremely bad weather had precluded satisfactory air reconnaissance, and the German concentration had been carried out with a high degree of secrecy. However, on the 18th I was considering the possible effects of a major enemy thrust towards Brussels and Antwerp on our dispositions—for the Army Group was at that time transferring the bulk of its weight to the extreme northern flank. I ordered the concentration for the Rhineland battle to stop, and had plans prepared for switching some divisions from the Geilenkirchen sector to the West of the Meuse.

By the 19th the full implications of the German attack were established. It was known that the Sixth S.S. Panzer Army was thrusting in a North-westerly direction towards Liege, with the Fifth Panzer Army in a wider wheel on its left. The Seventh German Army was in support. On the same day the Supreme Commander entrusted to me temporary command of the First and Ninth U.S. Armies (with effect from the 20th), as they were at that time on the northern side of the German salient and therefore remote from the Twelfth U.S. Army Group axis.

On the 19th I ordered General Dempsey to move the 30th Corps West of the Meuse to a general line from Liege to Louvain, with patrols forward along the western bank of the river between Liege itself and Dinant. This Corps was thus suitably placed to prevent the enemy crossing the river, and could cover the routes from the South-East leading into Brussels. It subsequently became necessary in connection with the re-grouping of the American First Army to send some British divisions East of the Meuse. But throughout the battle I was anxious to avoid committing British forces more than was necessary. Had they become involved in large numbers, an acute administrative problem would have resulted from their lines of communication crossing the axis of the two American armies. Moreover, it

was foremost in my mind that as soon as we had defeated the German attack we should return to the business of the Rhineland battle as quickly as possible.

The Battle of the Ardennes was won primarily by the staunch fighting qualities of the American soldier, and the enemy's subsequent confusion was completed by the intense air action which became possible as weather conditions improved. The Sixth S.S. Panzer Army broke itself against the northern shoulder of the salient while the Fifth Panzer Army spent its drive in the fierce battles which centred on Bastogne. Regrouping of the First and Ninth U.S. Armies, assisted by British formations, made possible the rapid formation of a reserve corps of four U.S. divisions under General Collins. The action of this corps, co-ordinated with the drive from the South by General Patton's Third U.S. Army, pinched the enemy forces out of the salient and began the bitter struggle which was to push them out of the Siegfried Line.

The enemy had been prevented from crossing the Meuse in the nick of time. A detailed study of the battle would show how rapid re-grouping enabled the Allies to regain the initiative which the enemy had temporarily seized. Once we were sure of the Meuse crossings it became increasingly apparent that the opportunity had come to turn the enemy's position to our advantage. Hitler's projected counter-offensive ended in a tactical defeat, and the Germans received a tremendous battering. As soon as the situation had been restored I was able to order the British divisions North again to the concentration areas which had been made ready in December.

#### THE BATTLE OF THE RHINELAND .

The main objective of the Allies on the Western Front remained the Ruhr. Once the Ruhr had been isolated from the rest of Germany, the enemy's capacity to continue the struggle would quickly peter out. Beyond this, the object of our operations was to force mobile war on the enemy by developing operations into the northern plains of Germany. We therefore required to line up on the Rhine; then to bridge the river and gain a suitable jumping off position for a mobile campaign in the Spring. The enemy was in a very bad way; he had suffered another major defeat with heavy losses in men and equipment. Moreover, the great Russian winter offensive was now under way, and we did not wish to give the enemy the chance to switch forces to the East.

The Supreme Commander's orders to the 21st Army Group provided for a line-up on the Rhine from Dusseldorf northwards. The Ninth U.S. Army remained under my operational control.

First we had to eliminate the enemy salient West of the River Roer between Julich and Roermond. The Second Army completed this task by 28th January. The divisions concerned, less defensive troops left holding the river line, immediately started North to join the concentration for the Rhineland battle. In studying the plan for this battle you should notice how the grouping of the armies was related to their subsequent tasks. I have already mentioned the transfer of the Nijmegen bridgehead to the First Canadian Army, which was to be responsible for the northern thrust.

The Battle of the Rhineland was based on two converging offensives between the Rhine and the Meuse with the object of destroying the enemy forces masking the Ruhr. It was intended, by interdiction from the air and by employing the maximum available forces on the ground, to prevent the enemy withdrawing to the East bank of the Rhine. In this we were largely successful.

The First Canadian Army was ordered to launch an attack South-East from the area of the Nijmegen bridgehead to meet the Ninth U.S. Army, whose thrust was developed from the Julich-Roermond sector northwards. It was originally planned to launch the two operations almost simultaneously, but the southern thrust was delayed. In the event this proved to our advantage.

The date by which the Ninth U.S. Army could attack was dependent on the rate at which U.S. divisions could be released from other sectors of the Allied front, as the strength of that Army was to be increased to twelve divisions. Release of these divisions depended on the situation on the rest of the front. The Twelfth U.S. Army Group was still involved in the Ardennes, particularly in thrusting towards the system of dams on the River Roer which control its flood waters. As long as the enemy held these dams he was in a position to impose flood conditions likely to impede the crossing of the river. Farther South, the heaviest fighting was in the Saar and in the Colmar pocket—in both areas the enemy had achieved local successes. The weather remained an anxious uncertainty. The thaw was beginning and, apart from the floods, it was playing havoc with our road communications.

The concentration of divisions for the Canadian Army attack was completed in the first week of February. Elaborate arrangements were made to assemble the forces employed into the very confined concentration areas, and also to mislead the enemy about our intentions.

On 8th February the northern wing of the pincer movement started. The 30th Corps, under command of the First Canadian Army, launched its attack into the Reichswald Forest and the northern extension of the West Wall on a front of five divisions, supported by very considerable Air Forces and over 1,000 guns. This began the memorable battle which, in intensity and fierceness, equalled any which our troops have experienced in this war. The Germans quickly built up to about eleven equivalent divisions, including four parachute divisions and two armoured divisions. In particular their paratroops fought magnificently.

Meanwhile the situation was improving in other parts of the Allied front. Operations in the Colmar area had been successfully concluded and the Germans thrown back across the Rhine at the southern extremity of the Allied front; the Saar sector had been stabilized. More important still, the Sixth S.S. Panzer Army was transferred to the Eastern front to oppose the mounting Russian offensive. The concentration of American divisions into the Ninth U.S. Army was achieved remarkably quickly, over long distances, using shocking roads and tracks, and in appalling weather.

The launching of the American thrust had been planned to start between 10th and 15th February but at the last minute, before abandoning the Roer dams, the enemy carried out demolitions which loosed the flood waters. There followed an anxious period of waiting, with all the troops teed up for the battle, while the water subsided sufficiently to enable the crossing to be launched. On 23rd February the Ninth U.S. Army, under command of General Simpson, commenced its attack northwards towards the area where the First Canadian Army was fighting a most intense battle. Owing to the delay in starting the southern thrust, the Reichswald battle had drawn enemy strength from the Ninth U.S. Army sector. The Americans took every advantage of this opportunity and advanced with admirable speed; their action in its turn eased the pressure in the North.

As the Ninth U.S. Army swung North, the First U.S. Army was made

responsible by the Supreme Commander for the security of its southern flank; the thrusts towards Cologne were thus related directly to our operations.

The keynotes of the Battle of the Rhineland were the intense and fanatical opposition of the enemy who, as we had hoped, accepted battle West of the Rhine, and secondly the appalling weather conditions. The northern flank of the Reichswald operations was conducted mainly in various types of amphibious vehicles; in general, the mud and slush were indescribable and greatly hampered the movement of troops and supplies through the heavily-wooded areas which are so lacking in roads.

On 3rd March the two armies linked up, but it was not until the 10th that the enemy bridgehead covering Wesel was liquidated. The 21st Army Group was now lined up on the Rhine as far South as Dusseldorf.

The enemy had suffered yet another heavy defeat. He had lost nearly 100,000 men in killed, wounded and prisoners. Eighteen divisions and a large number of hastily formed units had been battered. The end of the War could now only be a matter of weeks. Once more the essential factor was speed.

Meanwhile, on 7/8th March, farther to the South, the First U.S. Army had secured the bridge intact at Remagen after a quick advance through most difficult country, and Cologne had been captured. By the middle of the month the Third U.S. Army completed a remarkable operation, which brought it up to the Rhine at Coblenz and thence along the line of the Moselle to Kyllburg. The Sixth U.S. Army Group was forcing its way into the Saar from the South.

#### OUTSTANDING GERMAN MISTAKES IN THE CAMPAIGN

This is a good moment to pause and consider the German situation at the time that the 21st Army Group was preparing to cross the Rhine. To my mind, from the time the Germans became involved in war with Russia and America in 1941, the fate of Germany was sealed. From then on the question was how long it would take the Allies to win.

Between Normandy and the Rhine the Germans made three major errors which were to lose them the war in Europe by May, 1945. The first was the decision to fight the Battle of France South of the Seine. By failing to surrender the territory between the Seine and the Loire and to take advantage of the Seine obstacle, they suffered those tremendous losses which I have already mentioned, and in addition there were obvious and widespread political repercussions. But they subsequently made a most remarkable recovery. They succeeded in forming and equipping new divisions, and they established a cohesive front on the rivers and canals of the Low Countries. They proceeded to build up a strong mobile striking force, which by December was ready for action.

Then came the second mistake. They launched a counter-offensive in the Ardennes designed to hit the Allies so hard that the German striking force could subsequently be switched to the East. But they failed to win the air battle first; they had not the air resources nor adequate supplies of fuel for a major counter stroke, and were wrong to attempt it. While some progress was made in the short period of bad weather, the enterprise was doomed to failure. A counter-attack, Yes; a counter-offensive, No.

Following the failure in the Ardennes, the proper procedure was to withdraw behind the Rhine. The third big mistake was the decision to stand and fight West of the river in the hope of masking the Ruhr.

After the crippling losses sustained in the Battle of the Rhineland, the end of the war was only a matter of weeks. The Germans had not the manpower to raise new divisions, and in any case their industry could not have equipped fresh formations. The policy of dispersing German industry rebounded now that they were unable to assemble war material or move it to the fighting troops. Their remaining oil refineries and storage plants were being subjected to increasingly heavy air attacks, and their communications were rapidly being reduced to a state of chaos. As a result they had not the transport or fuel necessary for mobile operations, nor had they the tanks to compete with the Allied armoured forces in battle.

#### THE BATTLE OF THE RHINE

The quicker we could engage the enemy in mobile warfare in the North German plains, the sooner the end would come. While the Battle of the Rhineland was proceeding, the details for the crossing of the Rhine were being worked out. Many engineering and administrative preparations had been initiated back in December, before the Ardennes counter-offensive. In particular, work had started on the roads and railways necessary to establish our lines of communication across the Meuse and Rhine. We had furthermore stocked the Second Army depots with some 130,000 tons of stores for the coming operations. And so the 21st Army Group launched the operation for crossing the Rhine a fortnight after completion of the Battle of the Rhineland. Future history must give the armies great credit for this. It was a most remarkable achievement.

The fortnight between the end of the Battle of the Rhineland and the crossing of the Rhine was one of intense activity. Formations were re-grouped and lined up in their correct positions, covered by a screen of troops holding the river bank. Dense and continuous clouds of smoke were employed to hide our intentions and final preparations.

The attack began on the night of 23rd March, and by the next morning all four assaulting divisions (two British and two American) and the British commando brigade had accomplished their initial crossings between Rheinburg and Rees. The key to the crossing was the important communication centre of Wesel, which was captured by the commando brigade after an intense air attack by Bomber Command. On the morning of the 24th, the XVIII U.S. Airborne Corps, with one British and one American airborne division, dropped on the East bank of the Rhine within supporting distance of our guns on the West bank.

The enemy reaction was initially strongest on the northern flank, where three parachute divisions had been concentrated. But generally speaking his power of manoeuvre was greatly limited by the very heavy air interdiction programme which had been originated several days before the assault. The airborne troops took full advantage of his failure to launch any effective counter-attack against them and rapidly made contact with the formations crossing the river. The British and American bridgeheads were quickly joined. Some remarkable engineering feats were accomplished in working ferries and bridging the river, and it is interesting to note that the Royal Navy was well to the fore with craft which had been dragged by road all across Belgium, Southern Holland and the Rhineland.

We were now in a position to drive into the plains of Northern Germany. It was a matter of great satisfaction to see how plans which had been maturing back on the Seine were reaching their fulfilment.

Meanwhile, the Remagen bridgehead continued to engage increasing enemy

forces, and in spite of them was steadily expanded. The bridgehead was extended to Bonn and the First U.S. Army began thrusting East and North-East in a drive which had reached the Paderborn area by the end of the month. The Third U.S. Army had crossed the Moselle and, in conjunction with the Sixth U.S. Army Group, eliminated the Saar triangle and brought the whole Allied front up to the Rhine. In the fourth week of March General Patton's forces crossed the river astride Mainz and came up on the right of the First U.S. Army.

#### THE ADVANCE TO THE ELBE AND BALTIC

Within four days our bridgehead over the Rhine had been established, and on 28th March the advance to the Elbe began. On the right flank the Ninth U.S. Army was directed to the sector Magdeburg-Wittenberge. In the centre the Second Army was to advance with its left flank on Hamburg. On the left, the 2nd Canadian Corps, after crossing through the Second Army bridgehead, swung North along the Rhine to outflank Arnhem and open up the routes leading northwards from that area. Later, the 1st Canadian Corps assaulted across the river at Arnhem and turned into western Holland to establish a protective flank between the Rhine and the Zuider Zee.

The enemy tried desperately to assemble his remaining forces in opposition to our advance. The core of his resistance formed on the Ems-Dortmund Canal, facing the left and centre of the Second Army. Bitter fighting ensued. In the meantime, in the Ninth U.S. Army sector and on the right of the Second Army progress was rapid. By 3rd April, the Ninth U.S. Army had reached the Weser in the Minden area and had linked up with the First U.S. Army advancing from the Remagen bridgehead. The Ruhr was enveloped. The Ninth U.S. Army reverted to the command of the Twelfth U.S. Army Group. The two U.S. armies proceeded with the clearance of the Ruhr and at the same time pushed forces eastwards to the Elbe.

The subsequent action of the 21st Army Group may be compared with the drive across North-West France. The German East-West lines of communication to the coast were progressively cut, and a series of right hooks were delivered to round up the enemy. The left flank formations drove up towards the coast to finish him off.

The 8th Corps of the Second Army crossed the Weser near Minden on 5th April, followed a few days later farther North by the 12th Corps, which then worked its way along the East bank in an advance that brought it to the outskirts of Hamburg. This wide turning movement loosened the enemy on the left, and while Bremen was masked from the South by the 30th Corps, a hook farther up river came in on the city from the East. Bremen fell at the end of the month.

The First Canadian Army made steady progress, and by mid-April had liberated most of northern Holland. By the same time the 1st Canadian Corps had safeguarded our flank in western Holland and isolated the large enemy garrison there.

The main drive to the Elbe continued towards Luneburg, which was reached on the 18th, and our forces began to line up on the southern bank of the river masking the city of Hamburg. The Elbe was crossed on 29th April and spearheads made straight for Lubeck in order to seal off the Schleswig-Holstein peninsula. At the same time, moving by road, a U.S. airborne corps of two divisions, together with the 6th British Airborne Division, formed a defensive flank facing East on the line Darchau-Schwerin-Wismar. Once across the river our operations were

virtually unopposed. The plan for outflanking Hamburg by a manoeuvre similar to that used at Bremen was actually under way when, on 2nd May, the Germans came out to negotiate its surrender. Across the Elbe the countryside was packed with a mass of German soldiers and refugees fleeing from our own advance and from that of the Russians, with whom we established contact on 2nd May.

The negotiations which began in Hamburg led on 3rd May to the despatch by Doenitz of envoys to my Tactical Headquarters, then at Luneburg Heath. By this time I had ordered a pause in our advance to be made on a line which would cover Hamburg and Lubeck. Some fighting was still in progress with German remnants in the Cuxhaven and Emden peninsulas.

The German delegation which came to my Headquarters was headed by General-Admiral von Friedeburg, Commander-in-Chief of the German Navy. He was accompanied by General Kinzel, Chief of Staff to Field-Marshal Busch, and by Vice-Admiral Wagner. I quickly established that they had not in fact come to negotiate the unconditional surrender of the troops on my front, and at once made it clear that I would not discuss any other matters. I did, however, take the opportunity to show von Friedeburg the operational situation on my map; and when he realized, apparently for the first time, the plight of the German armies on the various fronts, he broke down and wept. He hurried off to recommend to Doenitz the unconditional surrender of all German naval, land and air forces opposite the 21st Army Group. On the evening of 4th May, von Friedeburg returned to my Headquarters and signed the instrument of unconditional surrender of those forces.

Cease Fire was ordered on the 21st Army Group front as from 8 a.m. on 5th May.

## II

I have now outlined the part played by the 21st Army Group in the campaign in North-West Europe and for the next half-hour will talk briefly of certain matters of grouping, administration, and the handling of the various arms, with particular reference to the campaign itself.

### GROUPING

To be successful in battle the fighting machine must be so set in motion that it can develop its maximum power rapidly, and the troops must then be launched into battle properly; in fact, what I call "Stage Management of the Battle" must be first-class. The plan of battle must be made by the Commander, and in it he must give careful thought to the correct grouping of his formations, his armour, his artillery and other resources. Throughout the battle area the whole force must be so well balanced and poised that there will never be need to react to enemy thrusts; these can then be disregarded and the battle forced relentlessly to swing your way. This requires that the Commander should always be thinking far ahead, although of course his final decisions of grouping must await full development of the problem. Skill in grouping, and in quick re-grouping to meet the changing situation, is a very great art, and it requires much study before proficiency is obtained.

Consider the Battle of Normandy. I have shown how it was developed and accomplished according to the plan made well before D Day, and you will notice that the grouping of our resources was such that the enemy was unable at any time to cause us to deviate from our purpose. We held the initiative throughout, and

we arrived where we meant to be on time—in fact about a fortnight early. I have already given other examples, particularly in connection with the Battle of the Rhineland and the Battle of the Rhine.

It is worthy of note that in this campaign grouping, and the preserving of correct balance, were more vital than ever. In the northern sectors the magnitude of our commitments compared with available resources made it impossible to provide the text book scale of reserve formations, or indeed anything approaching it.

#### ADMINISTRATION

In the early stages of the campaign much depended on the successful issue of the administrative planning. The task was a formidable one, and in plain terms meant the export overseas of a community the size of the population of Birmingham. Over 287,000 men and 37,000 vehicles were pre-loaded into ships and landing craft prior to the assault, and in the first thirty days 1,100,000 British and American troops were put ashore.

There was the necessity to foresee and provide all that is required for a major static battle quickly followed by a rapid advance of some 400 miles, which entailed the landing of some 200,000 vehicles and 750,000 tons of stores during the corresponding period. And I can say that even in these exceptional conditions planned operations were never held up even for a single day by any lack of administrative resources.

In the early stages the vast quantities of stores required were landed over open beaches, a task which was greatly assisted by the Mulberry. The stores were directed into a number of field depots, whence they were despatched to the troops. As soon as conditions permitted, these field depots were concentrated into a single organization called the Rear Maintenance Area.

When the break-out from Normandy occurred, considerable problems arose because the lines of communication became stretched in a short time from Bayeux to Antwerp—that is some 400 miles. All bridges over the Seine were demolished, and the railway facilities extensively damaged. In order to maintain the advance, shipping and the discharge of material were cut well below the figure necessary for the daily maintenance of the force, so as to release every lorry possible for ferrying stores forward to the troops. We were thus eating into the reserves built up in the Rear Maintenance Area, and it became a matter of urgency to get bases farther forward and shorten the lines of communication. We had both feet off the ground, relying on opening up the Channel ports, particularly Dieppe, before our accumulated stocks became exhausted. But you have to take administrative risks in war as well as tactical ones; the point to realize is that a commander requires a nice judgment to know when risks are justifiable and when they are definitely not so.

Gradually the railway systems were re-established, and when eventually the port of Antwerp was opened to shipping, we were able to base ourselves firmly on depots established between there and Brussels. We continued to handle subsidiary tonnages through the Channel ports.

I would mention one very important feature of administration which has been confirmed during the campaign. It is that there is a reasonably constant figure covering the combined ammunition and petrol tonnages required, though of course the split between these commodities depends on the type of battle you are fighting.

It is not possible in such a short survey to go into any detail concerning the vast and complicated machinery necessary for the support of a modern army in the field. I will, however, mention the tremendous importance of Movements and Transportation. Their problems in this campaign were immense. There were the numerous technical and engineer problems of repairing and operating the damaged or demolished ports, railways and inland water transport systems of four European countries. Bridges had to be built over such obstacles as the Seine and the Rhine. Possibly even more important was the problem of co-ordinating and allocating traffic over the various means of carriage, and of setting up organizations for operating through services over the different national systems.

The "A" services, too, were confronted with special problems. The calculation of reinforcements required, together with a correct balance for every arm and trade, called for considerable foresight and experience, and had a very direct effect on the success of operations. I will also mention Welfare, which has reached a standard in the Army probably never previously approached.

Very great praise is due to the various Services and Departments which so successfully overcame their problems and difficulties and carried out their functions in such an efficient manner.

#### SPECIALIZED EQUIPMENT

Early in the planning for D Day it became evident that specialized armoured equipment would be necessary to overcome the beach defences. One of the recommendations made as a result of the Dieppe raid had, in fact, been that engineers should be carried behind armour up to the concrete obstacle which had to be breached. This idea was developed so that mechanical means could be used for placing or projecting charges from tanks without exposing the crews. Tank-carried bridges for crossing anti-tank ditches were developed as well, and were launched mechanically from behind armour.

The study of the particular problems presented by the Normandy beach defences led to the preparation of further specialized equipment. Mats laid from tanks were used to cross soft patches of clay on the beaches; a turretless tank was used as a means of providing a self-propelled ramp over which other vehicles could scale sea-walls; flail tanks for mine clearing and amphibious tanks to lead the assault were ready by D Day, and were integrated with the engineer tanks into well trained assault teams.

Specialized armour made an important contribution to the success of the landings. The beach defences were quickly overcome and the new technique of landing a great weight of armour early in the assault paid an excellent dividend.

As the campaign progressed, the need for special armoured devices became increasingly apparent. Against fixed defences such as existed around the ports, mine-sweeping tanks, flame-throwers and engineer tanks were invaluable. The Churchill flame-thrower was outstandingly successful throughout the campaign. It has a very great moral effect on the enemy and saved us many casualties.

The D Day technique for the early landing and quick build up of armour was also applied at the crossings of the Rhine and the Elbe. This was made possible by the use of amphibious tanks and amphibious assault craft carrying infantry, light vehicles and supporting weapons. It was largely the use of these craft which allowed operations to be continued throughout the Winter over the flooded areas between the Maas and the Rhine.

Armoured personnel carriers were also found to be necessary, and were improvised from tanks with the turret removed. Their use gave armoured mobility to infantry and enabled them more closely to accompany armour in the assault and pursuit. The vehicles, known as "Kangaroos," I shall mention again later.

All these various equipments were concentrated, for training and administration, in a special formation, the 79th Armoured Division. They were sub-allotted in support of formations and units as operations required. The divisional commander was responsible for providing competent advisers in the use of the equipment at all levels. It was found that centralization under him was essential in order to achieve flexibility and provide a controlled programme of workshops overhaul, rest and relief.

#### THE ROYAL ARMOURED CORPS

The R.A.C. lived up to its highest traditions in this campaign. It was really properly equipped with adequate scales of reserves, and the fighting gave full scope to its flexibility and adaptability.

The outstanding point which emerges once more is that we require only two basic types of tank—the capital tank (for fighting) and the light tank (for reconnaissance). The capital tank must be a weapon of universal application, suitable not only for working with the infantry in the attack and in the dog-fight battle, but also capable of operating in the spearheads of the armoured division in pursuit. I am convinced, as a result of experience from Alamein to the Baltic, that it is fundamentally unsound to aim at producing one type of tank for co-operation with the infantry and another for the armoured division. We require *one* tank which will do both jobs. I have learnt that the ubiquitous use of armour is a great battle-winning factor.

#### ARTILLERY

The Gunners have risen to great heights in this war and I doubt if the artillery has ever been so efficient as it is to-day.

In considering the future of the artillery, it is very important that we should get the organization right, with the correct balance between tracked guns and towed guns, and so on. The expenditure of ammunition in this campaign has been tremendous, and as a result of the experience we have gained, certain facts have emerged. It has been found that a large number of small shells over a given time produces a greater effect on the enemy than the same weight of larger shells. It is, moreover, important to remember that there is a time limit for bombardment, after which enemy morale gets no lower and further expenditure of ammunition is wasted. We have found that our own casualties rise in direct proportion to the distance of the infantry behind the artillery supporting fire.

All these facts point to the need for relatively small shells for close support of infantry, where neutralization and not destruction is the immediate object. The 25-pounder meets the case; it must have good fragmentation. I would mention the fuze problem as this requires study and development. We must have a good proximity fuze and a good time fuze.

Lastly, the Air Observation Post. The Air O.P. has proved its value in this campaign. It has become a necessary part of gunnery and we must press for a good aeroplane for the job. Very good R.A. officers are required for duty in the squadrons, and they must be selected with this in view. Primarily an Air O.P. officer must be a good gunner—it is not difficult to teach him to fly.

## THE ENGINEERS

The Engineer problems were unusually formidable, and had to be executed at a great speed.

In the early days the clearance of beach obstacles and mines gave rise to great anxiety and called for prolonged and detailed study. The problem of placing the Mulberries or artificial ports was solved by the excellent co-operation between the Royal Navy and the Engineers on both sides of the Channel. As the beachhead began to expand, we were faced with demolitions on a grand scale—demolition of ports, railways, bridges and airfields—combined with extensive and very skilful mine laying.

The repair of well-blitzed and intentionally demolished airfields, or more often construction of new ones, was in itself a major task upon which depended our support from the air.

Twin petrol pipelines were laid from Cherbourg across the Seine at Rouen, and from Boulogne stretching across the Rhine. These were supplied from ships pumping ashore, and later in particular from the famous "Pluto." The pipelines transported during the campaign more than a million tons of petrol.

We erected nearly two thousand Bailey bridges, including spans across the Seine, the Meuse, the Rhine and the Weser, some of which were nearly a mile long. It has once more been shown that rivers, even very big rivers with complete demolition belts, do not hold up an army, in spite of the weight of modern traffic.

Armour and the mass of lorries assisting the Army played havoc with the roads, and the maintenance of them in conditions of continual traffic, especially in low-lying districts in severe Winter conditions, was perhaps the most heart-rending task that faced the Engineers. They were greatly assisted by the Pioneer Corps, which in this task, as in so many others, did a very excellent job.

The most determined demolitions were in the ports. But we have proved that it is impossible to destroy a port so badly that it cannot be put into some sort of operation by the time the Navy have cleared the mines obstructing its entrance.

The Sappers were very well equipped, but it is important to remember that it is the human element—the resourceful officers and skilled and willing men—which is the major factor in engineering in war. We were often very short of Sappers, particularly during the big river-crossing operations.

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SIGNALS

It is fundamental that successful operations demand really efficient communications. It is therefore worth emphasizing that a commander, at whatever level, must take his Royal Signals adviser into his confidence from the earliest stages in preparing a plan.

Much of Signals' work was of the unspectacular, slogging variety which the provision of a vast network of communications involves. The constant aim of Signals was to build up the solid cable head as far forward as possible, to provide reliable jumping-off places for communications in the battle area. To serve my own Tactical Headquarters, which frequently moved at intervals of every two or three days, use was made of an ultra high-frequency wireless of an entirely new type (No. 10 set). This method gave me secure speech communication with my armies and my Main Headquarters.

I think that one of the main Signals lessons has been the necessity for insisting that the officers reach a really high standard of technical ability. Modern equipment becomes increasingly complicated and diverse, and the officers must know all about it if they are to get the best results.

#### THE INFANTRY

In spite of predictions to the contrary, the Infantry has lost none of its importance on the battlefield. Modern infantry is a master of more weapons than ever before, and the infantryman's life depends primarily on the skill with which he uses them; he must reach an increasingly higher standard of training. It has been a war of movement; but although the infantryman may motor into battle, his training must keep him hard and tough—a point which must never be overlooked in these days of troop-carrying transport.

The introduction of the armoured personnel carrier is an important innovation in the employment of infantry. It enables infantry to be transported across bullet-swept zones in order to arrive fresh at the vital part of the battlefield. The development of this technique has already gone far and done much to enlarge the scope of infantry tactics. For example, in the first major attack by the Canadian Army astride the Falaise road on 7th August, infantry carried in "Kangaroos" were moved by night a distance of five miles to their off-loading point; the last three miles of this advance were actually within the enemy positions, and the troops debussed almost on the edge of the enemy gun areas. They then fanned out to overrun the belt of country they were attacking.

The tendency to do more and more by night has been greatly facilitated by the provision of "artificial moonlight." Artificial moonlight, provided by search-light batteries, has now become a standard part of our military organization and has greatly assisted the activities of the infantryman. It has also proved its value in the more rearward areas to the bridge builders and administrative echelons.

It has again been the Infantry who suffered the heaviest casualties. I cannot praise too highly the stamina and persistence which the Infantry displayed in the campaign. Divisions were called upon to remain continuously in action for many months on end. To this they responded admirably, even during the very bitter Winter we experienced.

#### AIRBORNE FORCES

Airborne forces must now form an essential part of the Army, as there will often be occasions in which they can play a vital role. Apart from their participation in the battle, the threat of their use can be turned to important advantage, for experience has shown that thereby the enemy can be led to make considerable and even vital dispersals of his front line forces. This is in addition to the need to lock up troops in rear areas for guarding vital zones and installations when the opponent is known to have airborne troops at his disposal.

The use of airborne forces in highly mobile operations is limited, because the time required for planning their descents frequently results in the ground troops over-running the projected dropping zones. But in deliberate operations, such as the seaborne assault or the assault across a major river obstacle, airborne troops have proved to be a battle-winning factor.

The threat of an airborne operation, in conjunction with other factors, was material in causing the Germans to retain major formations in the Pas de Calais

during the initial period after our landing in Normandy. Nearer the battlefield, uncertainty as to our intentions, combined with the use of dummy paratroops, caused alarm and despondency to the enemy. This delayed the arrival on the battlefield of portions of his forces at a vital time.

There are a number of limitations in the use of airborne troops, chief of which is the uncertainty of weather. But I believe this factor will become less important in the future as scientific methods are developed to facilitate the use of aircraft under adverse weather conditions.

I think we must re-examine our present organization of the airborne division. I should like to see the paratroops and the glider-borne elements combined together in a standard type of brigade since, once it reaches the ground, the airborne brigade fights as infantry.

#### THE MEDICAL ORGANIZATION

No account of this campaign would be complete without some mention of the truly remarkable success of the medical organization. But it must be remembered that there were two factors which contributed greatly to the results achieved; probably no group of doctors has ever worked on better material and, secondly, they were caring for the men of a winning army. The men of the 21st Army Group were fully immunized and fully trained; their morale was at its highest; they were well clothed and well fed; they were fighting in a climate to which the average British soldier is accustomed; hygiene, both personal and unit, was exceptionally good; welfare services were well organized. The exhilarating effect of success also played its part in reducing the rates of sickness.

Commanders in the field must realize that the medical state of an army is not dependent on the doctors alone. Their efforts are immeasurably facilitated when morale is at its highest, and of all the factors which ensure a high state of morale, there is none more important than success.

The sickness amongst troops was almost halved as compared with the last war. It is striking that, as we swept through Germany liberating prison camps such as Belsen and Sandbostel where thousands of persons were dying of typhus, only twenty-five British troops contracted this disease. None died of it. This was due to preventive inoculations and to the adequate supply and use of a powder called D.D.T.

Air transport has been of great importance in the evacuation of casualties. By this means over a hundred thousand wounded men were evacuated to base hospitals from front line units. In the sphere of transfusion, great quantities of blood and blood plasma were used. A co-ordinated service of air transport and refrigerator trucks ensured that fresh blood was always at hand for surgeons working directly behind the lines, even during the rapid advance into Belgium.

Another interesting fact is that in the last war two out of every three men wounded in the belly died. Field Surgical Units, operating close behind the lines greatly reduced this danger. In the Normandy campaign two out of every three men wounded in the belly recovered.

The healing of war wounds has been revolutionized by the use of penicillin. Many men, who in the last war would have been permanent invalids, were fit and ready to go back to the line within a month of being wounded.

To sum up, the doctors were prepared to lay 15 to 1 that once a man got into their hands, whatever his injury, they would save his life and restore him to health. It is a fine thing that these odds were achieved with a handsome margin.

## CONCLUSION

I must emphasize that my narrative and remarks have been concerned with the 21st Army Group. This is in accordance with the title of my lecture, but it is well to remember that any complete story of the campaign in North-West Europe would tell you more of the tremendous effort of the United States and of the fighting on the more southerly sectors remote from the 21st Army Group zone.

I would also say that the scope of my lecture has permitted only the briefest reference to our great Russian ally, but we must remember that the Russians bore throughout the greatest weight of the enemy onslaught on land.

Events have amply shown what a splendid spirit of co-operation was achieved in this war between the Navy, Army and Air Force; I doubt if such a smooth and efficient system of working together has ever been achieved before. This applies equally to the relationships between the three British Services and their American counterparts.

It has been brought home to me, not only in this campaign but throughout the War, that the soldier on the battle front and the worker on the home front are closely linked members of the same team—neither can achieve any success without the other; both have to stand firm under fire and both have to see that their job is carried on in spite of all the enemy can do.

In this war the civilian on the home front has shown the true British spirit of determination to carry on, in spite of every difficulty and every danger that the enemy could cause. If he had not done so, the soldier on the battle front would have fought at a very great disadvantage.

In conclusion, I wish to pay tribute to the splendid fighting spirit, heroism and endurance of the ordinary soldier of the British Commonwealth of Nations. Once again he has indeed proved himself second to none. And if I were asked what is the greatest single factor which contributed to his success, I would say morale. I call morale the greatest single factor in war. A high morale is based on discipline, self-respect and confidence of the soldier in his commanders, in his weapons, and in himself. Without high morale, no success can be achieved—however good may be the strategic or tactical plan, or anything else. High morale is a pearl of very great price. And the surest way to obtain it is by success in battle.

## THE CHAIRMAN

I am sure you will agree that Field-Marshal Montgomery has given us considerable food for thought, and I do not want to add too much for fear that we might produce a state of mental indigestion, but there are two points to which I should like to draw your attention as they bear a direct relation to what we have been hearing.

The first point is one which Field-Marshal Montgomery alluded to in the first part of his lecture, namely the inter-relationship of the three Services in war. We knew before we started the war that this was a very potent and important factor, but we finished the war knowing that it was absolutely and completely vital. This United Institution—and I should like to see the word "United" in very large block letters on every document connected with the Institution—stands for the furthering of that spirit. In any operation I think it is difficult to dissect nowadays the integral parts played by the Army, the Air Force or the Navy, for they are too closely inter-locked; and I should like to suggest to the Institution that we might in future follow what I have seen done on previous occasions; the last occasions

when I saw it were at the meeting in March, 1944, referred to by the Field-Marshal, and at another held by General Eisenhower on the forthcoming operations. We were listening then to what we hoped would happen. On the rostrum were representatives of the three Services talking in succession, and interlocking their parts. We have three seats here on this rostrum; and I hope that in the future we may see there representatives of the three Services so that we may hear an operation described in its full and closely interlocked nature.

That is the first thought I should like to leave with you—the vital importance of maintaining unity between the three Services. They cannot be dissociated any more; each one is interdependent on the others, and I feel that this Institution has a great part to play in fostering that spirit of unity.

The next point I want to come to deals with the close interrelation between various theatres of war. Nowadays, in a shrunken world, separate theatres are blended into one large battlefield, and that battlefield comprises the whole world. You will remember in 1942 and 1943 that it was not for lack of pressure in certain quarters that we were not driven into carrying out Second Front operations across the Channel. You will remember certain Trafalgar Square and Albert Hall meetings pressing for such operations. Those meetings were not easy to ignore. However, a great deal still had to be done in other theatres of war before we could produce a situation justifying cross-Channel operations. The strength of the German Army in those early stages was such that the risk of crossing the Channel, with a lack of equipment, a lack of pipes for petrol supply across the Channel, a lack of artificial harbours, was too great to contemplate; and beyond that was the far more important fact that Germany was not ripe yet for an operation of that kind.

We had first to carry out an air offensive against Germany to produce a state of gradual creeping paralysis. We had to ferry across the Atlantic masses of trucks, material and men, while at the same time diverting the German forces into other theatres. Consequently our attention had first to be directed to the Mediterranean. The initial step was to clear North Africa, to open the Mediterranean, and to save one million tons of shipping. By opening the Mediterranean we achieved two objects; first we secured additional shipping, and second we threatened Southern Europe. If you look at a map of Central Europe you will see that all the main railway communications run East and West; they were so developed in order to provide the needs of two possible fronts; the majority of the German *autobahns* were laid East and West. If you look at the communications running from North to South you will see that they are restricted; those leading to Italy or Greece are poor. Geographically, Southern Europe represents a mass of fingers pointing South; some are continuous, some are broken such as Sardinia and Corsica. To distribute forces against invasion in Southern Europe entails a dispersal of those forces under conditions in which it is difficult to concentrate them to meet attack; and without supremacy on the sea the position becomes a dangerous one.

Therefore, by threatening Southern Europe—what our late Prime Minister called the “under-belly” of the animal—we forced a dispersal of German forces under conditions which were not welcome to them. Having achieved such a dispersal, we were then in a position to begin to look more seriously to the Channel crossing and complete plans which had been under preparation here for many months. All the various fronts were very closely interlocked and throughout the

operations remained interdependent. We had exactly the same problem, but on a larger scale, as the one referred to by Field-Marshal Montgomery, of grouping on the battlefield. Grouping in the strategical field was of equal importance, but more difficult to accomplish owing to the time involved in strategic moves. Forces had to be sent back from Italy in order to provide seasoned troops to assist in the cross-Channel operation, while other forces were detached for landings in Southern France.

On the Eastern front the Russian roller, which earlier had rolled right back to meet the first inflow of the German forces, was now crushing its way into Germany. We had arrived in 1944 at a situation in which we could finally undertake the cross-Channel operation; in all theatres the Germans were adequately held; in the battle of the Atlantic the submarine was defeated; in the battle of the air paralysis was creeping over Germany through shortage of oil; and our forces in the Mediterranean were holding large German forces in the South. The moment to launch the cross-Channel attack had come.

I do not want to take up any more of your time, but I should like on your behalf to convey your thanks and great gratitude to Field-Marshal Montgomery for all the time and trouble he has taken in preparing the most excellent lecture which we have had the pleasure of hearing.

AIR CHIEF MARSHAL SIR ROBERT BROOKE-POPHAM (Chairman of the Council): I am sure we should like to express our very warm gratitude to Sir Alan Brooke for coming here and presiding this afternoon, but before asking you to do that I should like to draw your attention to two trophies at the back of this hall. The Union Jack was the first to be hoisted in Berlin and it has been presented to this Institution by Field-Marshal Montgomery; another debt this Institution owes him. Underneath is the Nazi emblem taken from the depot ship of the Wilhelmshaven and Pillau submarine flotilla, the "Weichal." That ship is now H.M. ship "Royal Rupert" and the emblem was presented by her Captain—Captain Condor, R.N.

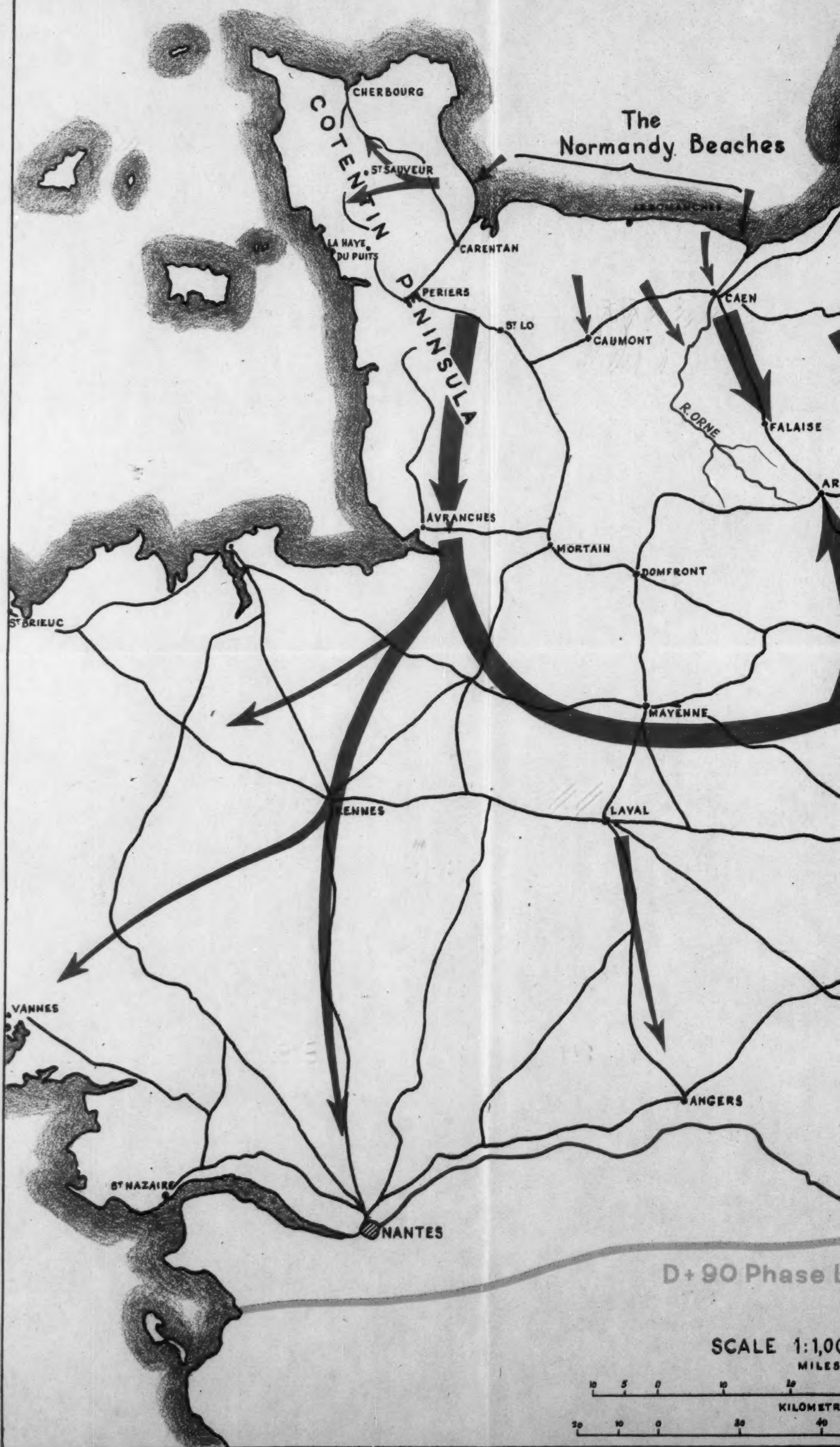
I would ask you now to express your deep gratitude to Field-Marshal Sir Alan Brooke for sparing the time to come here this afternoon.

The votes of thanks to the Lecturer and Chairman were carried by acclamation.



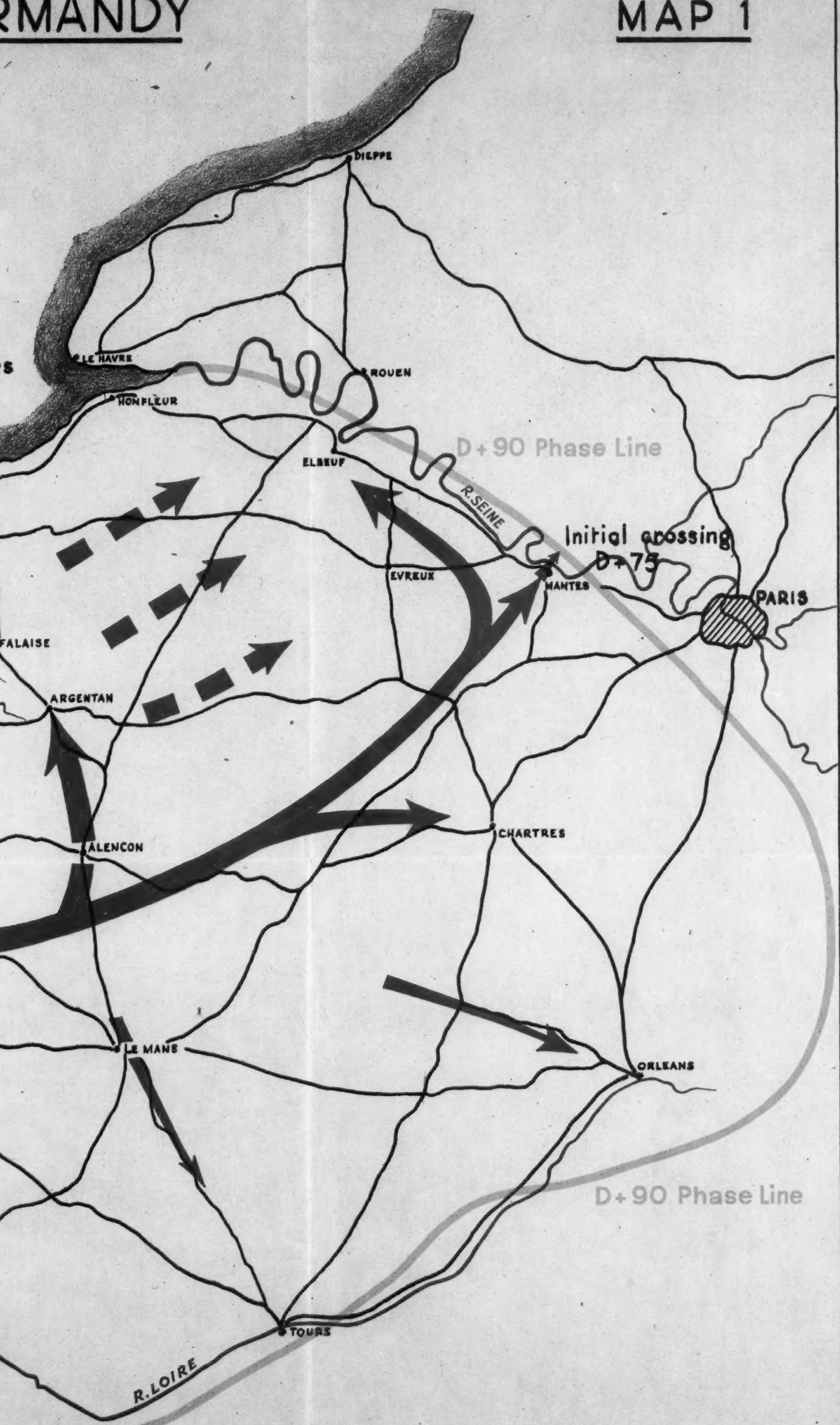
# THE BATTLE OF NORMANDY

ENGLISH CHANNEL



# ORMANDY

## MAP 1



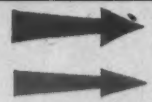
Phase Line

Scale 1:1,000,000



# THE SEINE TO THE BALTIC

BRITISH & CANADIAN ARMIES  
UNITED STATES ARMIES



SCALE 1:2,000,000

20 0 20 40 60 80 100 120 140  
MILES



**MAP 2**





## PROBLEMS AT AN INTEGRATED HEADQUARTERS

By GENERAL W. BEDELL SMITH, United States Army.

On Wednesday, 10th October, 1945.

AIR CHIEF MARSHAL SIR ROBERT BROOKE-POPHAM, G.C.V.O., K.B.E., C.M.G.,  
D.S.O., A.F.C., in the Chair.

THE CHAIRMAN: Last week Field-Marshal Sir Bernard Montgomery stressed how important a part Allied co-operation played in our victory, so it is very fitting that to-day we should have a talk about problems at Allied Headquarters and that our Lecturer should be General Bedell Smith. He fought in the last war, was the United States Secretary of the Combined Chiefs of Staff at Washington, and has been Chief of Staff to General Eisenhower ever since he came over to this country. I will now ask General Bedell Smith to address you.

### LECTURE

**H**AVING been asked to talk on the subject of Integrated Headquarters, I accepted the invitation with alacrity because I cannot imagine any subject which should interest all of us more at this time.

Waging war on an Allied basis is historically and traditionally difficult. I have just finished re-reading Churchill's *Life of Marlborough* which is replete with the horrible difficulties which confront an Allied Command. Marlborough even had to consult his several Governments before he could order the envelopment of a flank. I think that we can be very proud that during the operations that have just ended so victoriously the English-speaking people have overcome the difficulties of operations on an Allied basis; and it would be most unfortunate if we were to allow ourselves to forget the lessons we have learnt or to lose the experience we have gained, since smooth operations are only the result of considerable initial friction which finally produces the finely burnished surfaces that enable the machine to run without too much heat.

In my opinion there are two conditions which are pre-requisite to the successful functioning of an Integrated Headquarters in an integrated armed force. Before the forces of two Allied Nations can be amalgamated so that they can function effectively there must be one commander who has control of all the power which the participating nations have put into one theatre of war, and the Governments must have sufficient confidence in the commander to give him rather a broad charter of command. Secondly, there must be the absence of the language barrier. I am confident that had the language barrier existed we should never have been able to set up an Allied Headquarters on the basis of the one which operated on the Continent; in fact, we have very definite evidence to the contrary.

I say that we must have a common language. We must have a common technical language as well. Actually, that does not exist until British and American officers have worked together for a while. We found to our sorrow that such terms as "Diversionary Effort," "Secondary Effort" and "Constant Pressure"—the "canned language" our Service Schools used on both sides of the Atlantic, mean something quite different to English and American officers. Sometimes this was amusing. In North Africa, General Eisenhower once returned a requisition for 10,000 sleepers with the note "For Heaven's sake, what do they want all these for?" It was explained that "sleepers" meant railroad ties, not Pullman cars. We

never heard an American officer say "gas"; it was always "petrol." "Lorries" were almost always "trucks" to our British officers. We used the term "wagons" instead of "rail cars." We generally adopted the most expressive and shortest term.

#### STAFF ORGANIZATION

The actual organization of the Staff is not particularly important. For convenience, we had the American system, in deference to the fact that we had an American Commander. American staff organization is based on what you call the "Continental" system, with a staff divided functionally into sections for Personnel, Intelligence, Operations and Supply, headed by a Chief of Staff. This is a system which is not at all strange to the British officer. Field-Marshal Alexander, Field-Marshal Montgomery and Field-Marshal Sir Henry Wilson have used the same system, at least to the extent of having one chief at the head of the whole staff organization. Field-Marshal Alexander once told me that at one time he wrote a telegram to the War Office in which he pointed out the advantages of the Continental system, and went on to be so rude as to say that the British Service adhered to it either through tradition or unwillingness to pay another Lieutenant-General.

But there is one thing which is extremely important. An integrated Staff gets along only by the exercise of considerable tact and a great deal of goodwill, and misfits must be eliminated ruthlessly. There are many able officers who are not qualified to serve on an Allied staff, and as soon as you find them they must be given another place, otherwise friction is bound to exist. There must also be almost a fierce determination on the part of the Commander to make the thing work, because the Staff and subordinate commanders take their cue from him. The Allied Headquarters which planned the invasion of North Africa was built on this principle, and Supreme Headquarters for the invasion of Europe followed the same plan.

#### COMMAND SYSTEM

Before proceeding further I want to mention the transcendently important matter of the command system. I have spoken of the necessity of a Supreme Commander who controls all the means allocated to his theatre of war. How the chain of command will function below that level is even more important, particularly because of the difference in organization of the several Services of our two nations. According to the United States theory—and I say only "theory" because I believe that while we Americans have given lip service to the principle of unity of command, the practice was carried out more completely here in Europe than it actually was in some of the forces composed exclusively of American units—on the American theory the ideal arrangement would be a single Commander who was taught and trained to think along three-dimensional lines, assisted by a completely integrated Staff who advised him technically and tactically and whose decisions were final. Actually, that is not entirely practical when the forces of two nations are operating together. The Senior Naval Commander and the Senior Air Commander, naturally and rightly, consider themselves better qualified than any staff officer to give advice in their own particular sphere. For that reason, the staffs of the Naval and Air Commanders-in-Chief were organized generally parallel with the staff of Supreme Headquarters. I always insisted, however, that the three staffs be brought into complete contact and complete integration in the fields of Intelligence and of Planning. Our Joint Intelligence personnel—naval, ground and air, were actually all part of the Supreme Commander's Staff although the naval and air components

drew their inspiration from their respective Commanders and consulted them constantly. After plans were formulated on a joint basis, they were sent to the Naval and Air Commands for concurrence or objection, and these officers, being the seniors in their particular Service, advised the Supreme Commander. Differences were thrashed out and settled on the Command level. I think this is a perfectly workable and satisfactory arrangement. I know it worked in our Headquarters. Initially there was some feeling that by placing directly on the Supreme Commander's Staff experienced officers of the Air and Naval Services, these Commanders were to a certain extent giving up their prerogative of principal adviser, but in actual practice this was not the case and the system worked very well.

It has often been asked why there was not a ground Commander-in-Chief on the same level and with similar responsibilities as those of the Naval Commander and Air Commanders. This was urged a number of times, and from several different sources during the campaign in Europe. I can answer this best by quoting General Eisenhower on the subject. He said: "Ground forces will ordinarily be commanded according to the possibilities, frequently determined by geography, of close battlefield supervision. Battlefield command extends upwards through the Division, Corps, Army and Army Group Commanders. This last Commander is the highest who has a logistical function separate from that of the Theatre or Supreme Commander, and who can be sufficiently freed from broad strategic, logistic and civil problems to enable him to give his entire attention to the battle. The next higher Commander above the Army Group necessarily commands air, sea, logistic co-ordination and strategy. When the ground front is such that its configuration and extent permit close battle supervision by a single Army Group Commander, then this officer is also the "Ground Commander" of the whole Force. But when the extent of the front necessitates more than one Army Group in a single theatre, there cannot logically be an over-all Ground Commander separate from the Supreme or Theatre Commander. Each Army Group will usually occupy a well defined corridor of strategic advance. Because morale is so important in war, and because nationalistic considerations so frequently affect morale, Allied forces will sometimes find it necessary to make adjustments in any Command system based strictly upon military considerations. Unless the resulting scheme of Command is completely practical, the Allied forces cannot develop their full powers."

You have seen illustrations of Command under all of the above conditions during the campaigns in North Africa and on the Continent. In North Africa, at first the Command system gradually crystallized into one Commander on the fighting front, while other Commanders were planning the next operation. Then we invaded Italy and, again, we had one field Commander—Field-Marshal Alexander. For the actual attack across the Channel during the initial lodgment phase, Field-Marshal Montgomery exercised the ground command. As soon as we brought another Army into the picture which began to operate on divergent and on well defined strategic lines, the Supreme Commander took direct control of the battle and exercised his functions through his own Staff; and that is as it must be. There is one point: I invite your attention to the last paragraph in which General Eisenhower says: "Because morale is so important in war, and because nationalistic considerations so frequently affect morale, Allied forces will sometimes find it necessary to make adjustments." That is a very important consideration. Troops fight better under Commanders of their own nationality, unless they can, from long association, be inspired to have complete confidence in a foreign commander. It must have been only after a lot of heart-searching thought that the British Chiefs of Staff agreed to

accept an untried and relatively unknown foreign Commander for their first great venture into North Africa, and it is to the eternal credit of their Government that that decision was made in the interests of what they believed to be a correct principle of European Command. Later, when General Eisenhower had firmly established himself and had acquired the confidence of the British Government, the decision was not so difficult, and the effects of this feeling of confidence were strongly apparent prior to and during the campaign in Europe.

There is, on a wide battle front occupied by several Army Groups representing two or more nations, a series of "Twilight Zones" which will always present command difficulties. There are boundaries between the forces of different nations; for example, on the front in France there was the boundary between the 21st Army Group and its adjacent American Army. It is these sensitive areas where Commanders feel that the tactical situation may require them to manoeuvre across established tactical boundaries that there is likely to be command uncertainty or difficulty. We usually tried to solve the problem by giving one or other Army Group Commander operational control along the boundary between Army Groups. I do not believe that this is entirely a satisfactory solution, though it was the best compromise that we could arrive at. A more clear-cut solution would be for the Commander himself, or his Deputy, with a small operational staff, to be present in the area of main effort where he can himself, by immediate decisions, co-ordinate the Army Group boundary.

Although I have said that for this discussion the internal organization of the Staff is relatively unimportant, I should like to point out that the Staff must be organized, to a much greater extent than might be apparent from casual examination, to assist the Supreme Commander to carry out his very extensive tactical functions as distinct from his strategical functions. Those of you who served with the Supreme Headquarters Staff are aware how frequently and on what short notice General Eisenhower was called upon to make major tactical decisions, and I will not elaborate.

#### ORGANIZATION FOR SUPPLY

Organization for Supply usually presents the greatest difficulties because the forces of different nations will have different types of equipment. During the operations in France, however, it was relatively simple. We were operating from well stocked bases in the United Kingdom, and were able to establish two complete lines of communication. Remember, however, that such a set-up definitely limits the flexibility of the forces involved because it is difficult to make any distribution of forces which involves the crossing of lines of communication. During operations on the Continent this was not often necessary, and then only on a relatively small scale, but we felt this limitation during the early stages of the German counter-offensive in the Ardennes. In North Africa during the initial phase we were operating from one common base in Algiers. That was a very different situation, but it was solved without any serious difficulty. Our able Chief Administrative Officer considered this one line of communications to be a pipe line through which flowed the material that serviced the French, British and American forces on the front and, like any other pipe line, it was developed so that the load which it was carrying—the rations, ammunition and material, could be tapped off into smaller channels to service the American and French component on the South and the British component on the North; an excellent, sound piece of organization and one which worked very well. It meant multiplying to a certain extent the personnel at certain main

depots, but with our initial small forces it so increased the flexibility as to make it well worth the trouble. The same condition existed at the Anzio landing. There, British and American forces in almost equal numbers were serviced in one small area on the same principle.

It is most important that the maximum flexibility be provided for moving services, such as Engineer, Medical and Signal units which are always in short supply, from one part of the front to another, and making them available to implement the major effort. We were quite successful in doing that. British motor truck and engineer units assisted General Patton's Army in the swing round the South flank of the German Army after the break-through at Avranches. When Field-Marshal Montgomery was preparing to cross the Rhine and had vast engineering problems, we were able to move battalions of American Engineers, truck units and general service units to assist him and take care of his rear areas while he used his British service units further forward for work directly with the troops which they were accustomed to support.

#### EVACUATION OF WOUNDED

Problems of medical supply and the evacuation of wounded cause a Commander more concern than any others. Both the British and American people are intensely alive to the care and treatment of their wounded. It was General Eisenhower's policy in all his campaigns that there was no nationality where our wounded were concerned. Medical facilities and facilities for evacuation were available equally to British, French and American troops, and the service was interchangeable. On the Continent, when emergencies in our evacuation system occurred, we met them by the transfer of British or American equipment or by air evacuation. The R.A.F. and the U.S. Air Forces co-operated magnificently in moving our wounded. Common-user items were well stocked in depots and transferred as the situation required. They were made available to any Army Group Commander who happened at the moment to be carrying on the principal effort.

#### CONCLUSION

I said at the beginning of this talk that the conduct of war on an Allied basis was historically and traditionally difficult. I well remember a statement made by a distinguished American General after the last war at a lecture at the War College while I was a student. He said, having in mind some bitter experiences through which he had just passed: "If it is ever the misfortune of the United States to have to wage another major war, let us all hope we may be able to do it without the assistance of Allies." I do not believe that any officer who served in Allied Force Headquarters or in Supreme Headquarters in France or in any of their subordinate Headquarters left with any such idea in mind. I have nothing but the most profound affection and respect for the British officers who served with me and who so ably assisted me for three long and difficult years. You produced some of the best detail planners and the best high level intelligence officers in the world, and if I were organizing another Headquarters to-morrow I would know exactly where to get my senior planning and intelligence officers if the War Office would be good enough to let me have them. It is interesting to note, in a Combined Staff, how the characteristics of the two nations dovetail together. The American officer is a rapid and aggressive operator, likely to be impatient of detailed planning, willing to let the last details go by default, anxious to get into operation and trusting that he can make up for any planning deficiency by his quickness in improvisation. The

British officer, meticulously trained in staff procedure, is insistent that the planning be done to the last detail before he is willing to say that he is prepared to go, and he is willing to take more time than his American colleagues likes to spend; but he is thorough, careful and equally determined. Combined, each compensates for the other, and the result is great strength. Thus, our Headquarters produced what I consider to be one of the best expressions of Allied solidarity during this war. Our people were adequate to meet any emergency and geared to undertake the most difficult tasks.

I can never be grateful enough to those officers who served with me and who supported me so loyally. Incidentally, General Eisenhower asked me to point out when I addressed this Institution the fact that never during the course of the Campaigns in North Africa or in Europe were he or his Deputy and his Staff of different opinion regarding either strategical or tactical operations. That is a remarkable thing, because the Staff was not composed of "Yes" men by any manner of means. I believe Sir Arthur Tedder will confirm this, and that it was the keynote of success.

#### DISCUSSION

LIEUT.-GENERAL SIR JAMES A. H. GAMMELL: As I succeeded General Bedell Smith at A.F.H.Q., I would like to say here and now what a wonderful thing it was—and I think I can speak for my Commander, Field-Marshal Sir Henry Wilson—to come into a Headquarters where all the bearings had already been polished, and where there was no friction.

It was an abrupt change from being G.O.C.-in-C., Eastern Command, to go suddenly as Chief of Staff into an American organized Headquarters, and I tell you I did it with some trepidation. But thanks to all that had been done before, I think it worked very well. I would like if I may, on our side, to say exactly the same as General Bedell Smith has said about the American officers who worked for me when I was in his shoes. Many of the American officers in A.F.H.Q. were some of the most magnificent men that I have ever met; A.F.H.Q. was a marvellous show.

When Field-Marshal Sir Henry Wilson took over from General Eisenhower in the Mediterranean, and when I took over from General Bedell Smith, there was a good deal "added unto us," in that A.F.H.Q. was concerned with the whole of the Balkan problem and really the whole of the Mediterranean and Southern Europe from the Black Sea to Gibraltar. Inevitably there was even more on the political side than there was, I think, in your day?

THE LECTURER: Yes.

LIEUT.-GENERAL GAMMELL: I personally found that the American staff system as it stood was not, in my opinion, quite adequate to compete with all these very difficult political-military problems. Therefore, within two months of going to A.F.H.Q. we set up a thing called the Political and Inter-Service Secretariat which really was a little baby Cabinet Office on the spot consisting of a Secretary and an Assistant Secretary. Its job was to ensure that all the papers concerning all the Services were properly circulated and, most important, that Mr. Macmillan and Mr. Murphy, the political advisers, were kept thoroughly briefed about everything that was going on. It was also responsible for such vitally important business as the preparation of the agenda for Commanders-in-Chief conferences, for recording decisions, for the circulation of those decisions, and for ensuring that, in fact, action was taken in accordance with those decisions. I suggest that perhaps this addition to the American staff system made an even better machine for dealing with what was, I think, agreed by all to be an extremely complicated problem.

I do not know whether I can remember the exact words, but I should like to quote to you a telegram which Field-Marshal Sir Henry Wilson sent to Mr. Stimson after the capture of Rome. The Field-Marshal got a very nice telegram, and he replied somewhat in these terms: "I am very grateful for your telegram. What has been achieved in this theatre could never have been done without the spirit of mutual trust and co-operation which was instilled into these Headquarters by General Eisenhower. It will be my constant endeavour to promote that spirit and to prove to all that there are no difficulties or misunderstandings which cannot be got rid of by frank discussion and the recognition of the other man's point of view which is inherent in the way we both live."

THE LECTURER: I think that what General Gammell says is quite correct. There is that one deficiency in the stereotyped staff organization, although I doubt whether any staff ever had the multitude of delicate and complex political problems to deal with that the A.F.H.Q. had. However, we did have something approximating that in the difficulties which arose while we were in occupation of part of Germany and before the Supreme Headquarters disbanded. There we solved the problem by adding another division—G-5, to the staff. This division dealt with Civil Affairs and later with Military Government. This did not solve the problem of complete and adequate dissemination of information which might very well be attained in the way you mentioned or by increasing the strength and calibre of the Secretaries of the Staff.

LIEUT.-GENERAL GAMMELL: Yes, that is it. I think really the right answer is perhaps the increase of the Secretaries of the General Staff, although in that particular case I do not think the fellows could have been obtained on the spot.

THE LECTURER: A good Staff Secretary is a very scarce and precious commodity.

BRIGADIER E. J. B. BUCHANAN: Among the factors essential to the success of an Allied Headquarters mentioned by General Bedell-Smith was the determination on the part of the Commander and his Chief of Staff to see that the system worked. I do not pretend to know what effort of determination was required by General Smith or his Supreme Commander to make the Staff work, but as one of them I can assure you that it worked extremely well and smoothly. We were, indeed, a very happy team. Now that we have separated, we (and I am sure I am speaking for the rest of the British staff) feel that we have many very good friends on the other side of the Atlantic, and I am certain that it is a good augury for the future peace that General Eisenhower led such an extremely successful and happy team first in North Africa and later in France.

MARSHAL OF THE ROYAL AIR FORCE SIR ARTHUR TEDDER: I have a feeling that the historians (and there may be some here) will start now producing graphs showing exactly the chain of Command and all the rest of it, and I expect some of those graphs will look rather "phoney." I am sure the Staff Colleges will tear them to bits and say: "This is a pretty 'phoney' organization." Quite frankly, I do not think it matters what those graphs are like or what those staff channels really look like on paper at all.

There were one or two occasions where, in North Africa, on the Air side we tried to "tidy up" the staff channels and Command, and after about six weeks of struggling we were in such bad tempers with ourselves and each other, British and American, that General Spaatz and I came to the conclusion: "Let us put all this in the waste paper basket and just go on as we were." It was most untidy, but it worked. It comes back to having the right people and being ruthless. The right people, of course, also include the Commander-in-Chief. We had our moments, as General Bedell Smith will remember, with our Commanders-in-Chief in the different theatres. You have got to have the right people and, even so, you have got to have a great man as Supreme Commander.

On the staff level again, in being ruthless about people who do not fit, and you must be ruthless, just give it long enough to make sure that the initial sparks are not just the sort of sparks which are going to get them working together. But if a man does not fit he will never learn the language and you will never make a team; that is the guts of the whole thing, the team; but, on the whole, as a team we did agree.

There is one other thing I would like to mention, and that is, in selecting people for this sort of job, do not worry too much about the language difficulty; that can be overcome with a little gin, and so on; but you have to have people who are, to a degree, selfless. They must be prepared to set on one side, in the interests of their Supreme Commander and their job, what they may think to be their national interests and what they may know to be their personal interests. In other words, they have got to be able to put their personal ambitions on one side for the job. That is a very important point, because there are a number of people who have had to do that and have done it with good grace. The result was that we had a team.

Those are the main points, but I would like to congratulate General Bedell Smith on the clarity and frankness with which he has summed up what was quite a ticklish job.

THE LECTURER: Thank you. I am glad you mentioned what I forgot to do, the lubricating effect of a few gins-and-bitters, which make even the Yorkshireman and the Yankee speak the same language.

AIR MARSHAL SIR J. M. ROBB: I have not any questions to ask my late Chief of Staff, but I would like just to add a word to what he has said about the way the Staff worked together, because I think possibly I gave him one of the biggest problems at one time when it became necessary to add virtually a complete Air Staff to his existing Staff. The understanding that he showed me on that occasion made the whole new formation take heart and work easily. I went to see him at one time and said: "How much do you want to see of the Air Staff work? Do you want to be kept in touch with the day-to-day problems?" The answer I got, as I expected, was: "It is up to you. Only bring to me the major problems which will, in due course, affect the Supreme Commander." I, too, am glad of this opportunity of adding a word of thanks to what has been said for the understanding that General Eisenhower and the Chief of Staff showed to one of his deputies, and to the whole of the Air Staff who worked under him.

#### THE CHAIRMAN

If there are no other questions and nobody wants to add anything, I would like to emphasize two points. First, that a great example of co-operation between nations has been set to the world; an example not only for war, but also for peace. Why cannot we have the same thing going on in peace as we have had in war? There will be one or two things, of course, which we cannot have exactly the same; for instance, there will be no Supreme Commander-in-Chief exactly like General Eisenhower. But there are other precedents that can be carried on; gin-and-bitters were mentioned; at Allied Headquarters everybody seemed to be on Christian-name terms. It seems to me that whoever is going to run similar things in peace, the diplomats and politicians should follow the example that has been set in these last two or three years. In selecting people for important diplomatic posts, ability to get on with other men must be an important consideration.

The other point is the way that the American and British staff dove-tailed in, each supplying perhaps what the other lacked. There again, we should take this as an example, this time of how our two nations can support and supplement each other in peace. I feel that is a very hopeful sign for our future co-operation in the difficult years that lie ahead.

I will not say more, except just to ask you to express your very grateful thanks to General Bedell Smith for coming over here this morning and giving us such a very interesting talk. I thank him personally on behalf of all of you. (*Prolonged Applause.*)

## THE GERMAN PLAGUE

### A REVIEW ARTICLE

By GENERAL SIR R. GORDON-FINLAYSON, K.C.B., C.M.G., D.S.O.

NO man is better qualified than Brigadier-General Morgan to bring Germany into Court, and subsequently into the condemned cell, upon the matter of avoiding the terms of the Treaty of Versailles. He was, from 1919 to 1923, a very senior member of the Inter-Allied Commission of Control of Germany; and, being even then a considerable authority upon International Law, he was appointed to command what was called The Effectives Sub-Commission of the Control Commission, whose function was to disarm Germany.

During the last two years of General Morgan's time with the Commission in Germany, I was in charge of that Branch of the Intelligence Department in the War Office (M.I.3) which in those days acted as the War Office receiving end of all reports from the British Section of the Control Commission. Incidentally I also received my full share of metaphorical kicks from the Commission for being unable, even through my fully enlightened War Office chiefs, to persuade our Government of the period that the Germans were not playing the game, and ought to be handled severely, as our French colleagues were only too anxious to do. The War Office, of course, knew what was happening in Germany as our Intelligence Service over there had excellent opportunities and the Commission of Control's officers were everywhere. But there were, one supposes, political axes to grind, for our British politicians would risk nothing against Germany, even though France was pointing out the iniquities that the German General Staff were perpetrating under our very noses, and everyone "in the know," from General Morgan downwards, was convinced that Germany was deliberately preparing for a war of revenge. Some of the more talkative members of General von Seeckt's staff even admitted that this new war would come about some time after 1936 when her man-power situation would have begun to recover from the lean years of 1915 to 1918.

There is no doubt that the frustration from which the Commission suffered at the hands of our Government was enough at times to have infuriated far less determined individuals than the author of *Assize of Arms*, as General Morgan entitles his timely and valuable book.<sup>1</sup> This is easy to see in chapter after chapter of it as he lays bare truths which now, after another great war, we know we should have noted, and German activities which, in conjunction with our much more acute French allies, we should have stamped upon promptly and heavily. The reader may occasionally feel that what the author states or recommends arises from knowledge tinged with or improved by the facts that have transpired since the time he mostly writes about, namely 1920 to 1923. I can safely say that, so far as I see it, this is not so, for his statements bear out many of his known prognostications at the time, though I regret that even we who were working with him did not always see as clearly as he did. The explanation of that is, I think, that we were at a distance and as soldiers were concerned mainly with the more practical side of the Commission's work—the finding of arms and the destruction of Germany's war potential in armament.

<sup>1</sup> *Assize of Arms*—Vol. I. By J. H. MORGAN (Methuen & Co. Ltd., London), 15s. c

This book shows, however, that General Morgan's responsibilities were wider and more important. He had to try not only to destroy Germany's power of organizing and training the youth of the nation, but also to prevent the inculcation in those youths of the cult of war, of the spirit of ruthlessness and of the unworthy traditions of their forefathers. He published various articles on the subject from 1924 onwards; but now, at this vital period of the world's history, he has brought all his experiences and facts together again, urged on by high authorities, both British and French, in order that what happened after the Treaty of Versailles may not recur. That is his object, and it would be difficult to exaggerate its importance at the present time; indeed, I would like to see complimentary copies of this book supplied by the Government to all high authorities now concerned in building up a new Germany, with a specially bound copy to General MacArthur—for the Japanese will try every old German trick.

The immensity of the Allies' task must be fully realized for, as every paragraph of this book shows, Germany's wickedness is not skin deep, but has been handed down with compound interest from generation to generation. Of all those generations that of Frederick the Great (1712-1786) was most blameworthy. Former generations merely put toughness and the roughness of the period into Prussians; but the Frederick-the-Great tradition taught licentiousness and brutality, and that war for the Fatherland was the ultimate height to which human action could and should ascend. This is plainly depicted by the author, but he shows still more clearly that, as time has passed and other famous men like Clausewitz, Von der Goltz, Moltke, Ludendorf and finally Hitler have directed Germany's war machine, each new German generation has made war more cruelly, more ruthlessly and more immorally than its predecessor.

General Morgan asks how are we to ensure that these terrible wars and their terrible results shall not come to us again. He promises his definite plan in a second volume, but that has yet to be published; nevertheless from his Volume I, one sees that German deceit is so persistent, German belief in arms and force so deeply ingrained, German love of seeing its opponents suffer so characteristic, and German determination to harness the world to its own ends so obstinate, that the United Nations must bind that nation fast to a decent way of living before it can be trusted alone. General Morgan says that occupation for 29 years will be required, and no doubt Volume II will give us many good reasons for this view: it will be awaited with interest.

This is the general picture of what the author has to tell us, and he produces it so convincingly that little if any of it could be denied; but, with his trained legal mind and his logical brain, he is not content with statement only. He follows up his cases and produces, as a rule, irrefutable and damning evidence, very often out of the mouths of Germans themselves. It must be remembered, too, that General Morgan, besides being in Germany during those crucial years, already knew the Germans inside out—he was partly educated there. He admits his and the Commission's main failures, but shows clearly the reason for those failures—the reason which brought about the second World War: the weakness of British statesmen and diplomats in facing up to Germany ever since 11th November, 1918. The reason for that weakness was, in turn, that the Allies had maintained insufficient armed strength with which to clinch their arguments and enforce decisions; and the German even to-day understands nothing else. But now let us get down to a little more detail, chapter by chapter.

In Chapter I the author describes in a most realistic way the journey of the Commission's advanced guard through France to the Rhine in late 1919. "France's fairest provinces flayed," and "Christ! it reminds me of the Dead Sea," from one of the British Officers present, give an idea of the conditions of those days. One wonders, not without feelings of satisfaction, how these same officers might describe the Rhineland or Berlin to-day.

The reception of the advanced guard in Berlin, the condition of Berlin itself, and the behaviour of German officers in our officers' presence were not encouraging. We can imagine what would be the attitude of Germans in victory and we are shown what it was in defeat. This Chapter forms a necessary background to what is to come later. Incidentally the author's sense of humour is delicate and, without ever overdoing it in a serious theme, he makes us smile comfortably quite often. His description of the Military Court before which the profiteers and smugglers were brought shows how utterly different the Germans are from ourselves. "Their mendacity was inexhaustible and I observed that its exposure left them neither embarrassed nor ashamed." Then there is a human little story about fraternizing in those days; it is of little importance but worth mentioning to show that the author can and does look at his cases from a broadly human point of view.

Typically German was the reception of our officers; but as one gets to know the Germans better, it was truly characteristic of them. The British were "about as welcome as a couple of bailiffs sitting in a house under a Distress Warrant," but perhaps still more characteristic of Germans is the statement "the lighter we sought to make the yoke, the more unfriendly did the civil population become." All through the book we see more and more clearly how every act of grace was accepted by the Germans as an indication of weakness. In this respect, as in several others, they were as unfit in 1919 for the society of decent nations as the war of 1871 proved them then to be. In fact they were rather worse in 1919.

Chapter II, under the title "Reconnaissance," is a very readable description of the initial general look round by the Heads of the Commission. First impressions elsewhere were just as unfavourable as those in Berlin, and the attempt by the German Foreign Office to control the Commission, instead of vice versa, showed how the Allied Representatives would have to be firm and insistent in everything. An early example of this was when officers of the British Naval Section demanded better billets within 24 hours, or they would leave for England: the better billets were forthcoming at once.

Things were made very difficult for the Commission in those early days. Exhortations to "Kill the lot," appeared in the *Deutsche Zeitung*, and in fact feeling ran so high that General Weygand later said to the author, "We never expected any of you to come back alive." But the imperturbable French General Nollet—head of the Control Commission, remained calm. He parried all the efforts of the Germans to be allowed to disarm themselves [*sic*!] and to report to the Commission what they had done. That idea was too easy and was firmly rejected by Nollet, who usually saw at once through all the German bluff.

The result of the Reconnaissance is given at the end of Chapter II; it foreboded a bad time for the members of the Commission.

In Chapter III, "Battle Joined," the author, evidently with his blood up and with teeth set after the revelations of the Reconnaissance, describes the organization and strength of the Allied Commission. There were only 373 officers of five different nations, and no armed backing nearer than the neutral zone on the Rhine. At

midnight 8th-9th January, 1920, the hour for the coming into force of the Treaty, the whole Commission began its activities by spreading out from the Rhineland, where they had been concentrated and fully briefed, to selected centres all over Germany.

The author and his colleagues now began to see something more of Germany's hostile attitude towards them. The Germans' first plank was to bring the Commission into derision whenever possible and, as one reads on, one finds they often succeeded. Then they either refused to answer questions, or they gave false returns. It speaks much for the Commission's determination that they never succumbed to the temptation to become violent—the very thing the Germans wanted and understood how to meet. In this respect the contest of wills between General Nollet and General von Cramon—the Head of the German liaison branch, is very interesting and perhaps shows better than anything else how little the Germans would admit their defeat in the field. Fortunately, the circumstances are easier for the Allies this time.

By the end of Chapter III the reader will have concluded that the evil genius of Germany was the German General Staff with its Officers' Corps, backed by millions of demobilized but still armed ex-officers and ex-soldiers. Soon these grew tired of the Socialist Government then in power, and so a revolt of the *Reichswehr* was engineered, but so badly that it failed miserably. It became known to history as the "Kapp Putsch," from the name of Herr Kapp, the comparatively inoffensive and somewhat stupid stooge the Army put in to carry through their revolt. Curiously enough this attempted revolution fizzled out because the Army leaders themselves saw the weakness of the situation as it unfolded. They stepped in, when failure was obvious, to back the existing Government. Thus they saved the Army and actually heightened their own prestige: there is little honour even amongst thieves in Germany! The history of this revolt is given fairly fully and is particularly interesting as it is believed to have served as a model to Hitler of what not to do when he eventually set about reducing the power of the German Officers' Corps.

Chapter IV is very illuminating upon the actions and powers of the Communists in Germany at that period and shows how the failure of the "Kapp Putsch" at the hands of the *Reichswehr* really spelt the end of power for all democratic elements. We see too how the Army and the Security Police dealt with their opponents, and how for this cruel and bloody business they received an order of approval from General von Seeckt—all typically German.

Chapter V consists of a short sketch of a meal and interview with General von Kluck of 1914 fame. After reading it one can only feel how German military leaders of all ages will twist any evidence, no matter how dark against them, into something in their own favour: and they get away with it too, so strong is the position of the military caste. The leopard does not change his spots, and this is proved by the revelations against the Officers' Corps exposed in Chapters VI, VII and VIII. These chapters constitute, in view of the present need for rendering Germany harmless, the most important part of the book, and are of absorbing interest. The making of the officer is shown, the development of his character and the instilling into him of ruthlessness, which becomes a blood lust whenever he has his enemy at his mercy. General von Seeckt's first aim was to preserve the Officers' Corps, complete and efficient, for the future expansion of the Army. Therefore he set out to defeat the military clauses of the Treaty in every possible way, especially as to maintaining the largest number of trainers and of hidden though organized manpower.

These officers were excellently trained, but all on the self-same pattern, so that

each and all gave exactly the same answer to any question. As the author says "having spoken to one, one has spoken to all." There are advantages and disadvantages in that, but at any rate all quickly adopted the same tricks for defeating the Allied visiting officers, and without doubt were successful. This was partly because the Commission had no armed forces and were unsupported from home, and partly because of the loose wording of the Treaty, as will be readily understood in the use of terms like "war material" and "penalties."

Those chapters are too full of meat to be taken in greater detail. They must be read by everyone who wishes to know the truth about the German Officers' Corps and the dangers of it. We know now how history repeats itself and that the Corps will rise again if we weaken in any way.

Chapter IX is a continuation of the story of German effrontery despite their defeat and the Treaty of Versailles. The manner of re-entry of German forces into the forbidden neutral zone of the Rhineland to quell the Socialists—called Communists of course—and the troops used, mostly forbidden by Treaty, is a classic in pure insolence; but the book is full of such instances, nearly all the result of cleverly worked up cases intended, by the indirect or rebound method, to defeat the Commission of Control. The great imposture of "The Black Shame," arising out of French Colonial troops being stationed in the Rhineland, was just such another.

Our Foreign Office and some of our military representatives on the Continent all disagreed with France at the time, and were deceived by the Germans' cunning and false declarations, especially in regard to Russia and Communist activities, so it is not surprising that public opinion in England would neither back the Commission's recommendations nor the French when they marched into the Ruhr. This latter act led to considerable political trouble and helped to bring back to the *Reichswehr* its rather waning popularity. But I believe that, if the Commission had been strongly supported by Britain, that act would have done more than anything else to convince the German people that we meant business.

However, the Germans were never so impressed; they regarded us as weak and incapable of anything except shilly-shally. Chapter IX is more full of enlightenment as to Germany's political antics during those between-the-wars years than any other part of the book and, as we were not entirely free from out and out Bolshevism ourselves at this juncture, it is a chapter which every shade of political opinion should read and think about.

So ends that part of Volume I which shows us so clearly what should not be allowed again and largely how it can be avoided; it provides, too, lesson after lesson, so dearly bought, that we really must take them to heart this time. Then, as if to accentuate the wickedness of the host of German officers, against whom in the main the book is written, we are given Chapter X, "Goethe in Weimar Sleeps," probably to show us that General Morgan is not fanatical in tarring all Germans with the same brush: he does not assert that all are bad, but it is obvious that the teaching and upbringing of German youth has left them very little chance of decency. This is an interesting little chapter, rather sentimental and kind to start with, but shattering all illusion by reality before the end is reached.

The final Chapter, No. XI "Germany in Defeat," is the longest in the book and is one which one feels the author wishes he had not felt compelled to write so fully; but he had to in order to provide conclusive proof, if any more were needed, that his contentions and deductions are correct. He describes the contrast between the relatively smooth-running Rhineland, occupied and ruled by the Allies, with

the crookedness, chaos, lying and debauchment of the rest of Germany. There are things written here which we usually do not speak about, but the legal mind uses them as circumstantial evidence, and he carries the period forward to the advent of Hitler into power and the burning of the Reichstag, done to help Hitler to free himself from the local Communist menace.

"Rotten and worse than rotten," is how General Morgan describes the moral state of Germany and when one reads of the great food racket—which I myself saw and knew at the time to be a purely engineered scheme to get our food and money—of the filthy-mindedness of the German Army, of mass sex perversion, of the brutal treatment of our prisoners, of murder clubs and the lengths to which the Teutonic fury of German history can drive this usually dull but occasionally electric nation, one is left with no other conclusion than that what was done by them should now be done to them; that is, they should be broken up and dominated until educated in civilization.

General Morgan ends this Volume with the conclusion that "the fundamental mistake of the Disarmament Articles of the Treaty of Versailles was that they left Germany with any army at all." "If," he reasons, "... every nation gets the army it deserves, Germany as a nation is past praying for. . . . If, on the other hand, the German nation does not deserve the army, which indeed has chastised her with whips in preparing to chastise her neighbour with scorpions, . . . then the only hope for the regeneration of Germany as a nation is to deliver her from this yoke of iron." He adds, "It is, indeed, more than possible that by the abolition of the German Army the political problem presented by the difficulty of breaking up any nation, if indeed Germany is a nation . . . would solve itself."

"The strong 'particularist' tendencies, always latent in the German peoples of the North and South, the East and West, and only kept in check by the army, would, with the total disappearance of that army, most certainly reassert themselves and 'Germany' would, in all probability, 'break up' of its own accord," are his concluding words. It only remains to note that the Tripartite Conference of Berlin has ordained, in much detail, the complete disarmament and demilitarization of Germany. General Morgan has provided a timely and forceful reminder to the Allies that, this time, they must maintain the forces necessary to carry out their ordinance if they are really to make an end of the German plague.

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## AIR ATTACK ON COMMUNICATIONS

BY AIR MARSHAL SIR ROBERT H. M. S. SAUNDBY, K.B.E., C.B., M.C., D.F.C., A.F.C.

On Wednesday, 24th October, 1945

MARSHAL of the ROYAL AIR FORCE SIR ARTHUR W. TEDDER, G.C.B., in the Chair

THE CHAIRMAN: Air-Marshall Saundby does not require any introduction. He was Deputy Commander-in-Chief, Bomber Command, and he is going to talk about one of their main jobs—attacking communications.

### LECTURE

TO attempt to describe in a brief lecture the effect of air attack on communications with reference to an armed conflict covering such a vast geographical area and of such long duration as the last war is a difficult task. The principal difficulty is one of *embarras de richesse*. There is such a wealth of material to choose from that it would be impossible to deal adequately with it. I have therefore thought it best to confine my remarks to the European theatre of war and to deal with the effects of air attack on the German controlled system of communications. This method has the added advantage that I shall be talking about things of which I have first-hand knowledge.

Our air attack on the enemy's communications can be divided into three phases. First, the early period during which, owing to the lack of accurate blind-bombing devices, the main targets were large industrial areas and damage to communications was incidental and, generally speaking, not serious. The second phase was a deliberate attempt to paralyse the communications at the disposal of the enemy for concentrating and supplying his forces opposing our landing in Normandy, and the third phase was the attempt to isolate the battle areas, first of all in Normandy, but later in various zones eastward, culminating in the crossing of the Rhine in the Spring of 1945.

The enemy had at his disposal four principal means of communications—road, rail, sea and inland water transport. All were attacked, with varying degrees of intensity as the war situation demanded.

In what follows, I shall try as far as possible to follow a chronological arrangement, but it may be necessary at times, in order to avoid repetition, to depart from it.

After the collapse of France in 1940 a great bomber offensive remained the only way of striking at Germany, and the development of this offensive, aimed at undermining the enemy's war industry and disrupting his communications as a long term preparation for the final invasion of the continent, was planned as the central point in Allied offensive strategy. The task allotted to Bomber Command—at that time the only bomber force available—was so immense that the size of the force and the nature of its equipment were patently inadequate for the purpose. The gradual expansion and re-equipment of Bomber Command—a long and complicated process—and its reinforcement by the Eighth U.S. Bomber Command, lie outside the scope of this lecture. It is sufficient to recall that it was not until the Spring of 1943 that it was possible to deliver really powerful night attacks as a matter of routine. During the same year, also, the expansion of the Eighth U.S. Bomber Command enabled it to embark on its notable campaign—complementary to our night offensive—of bombing German installations in daylight, with fighter protection. This Allied partnership, as is now well known, succeeded in preventing the enemy from

achieving the necessary output of essential war equipment, and in this and many other ways made his final overthrow inevitable. Now that the War is over and the German war secrets are no longer hidden from us, there is concrete evidence of the decisive success achieved by the combined bomber offensive. In few respects was this success more powerfully felt by the enemy than in the disruption of his communications. In fact, during the last months of the war, the enemy's home communications system broke down completely under the blows of the heavy bombers, and the once omnipotent *Wehrmacht* was finally paralysed.

It is, however, necessary to remind ourselves that the attack of the enemy communications system was only one of two very important contributions made by the bombers to the cause of Allied victory. An equally important contribution was the steadily-increasing destruction of industrial centres, and consequent loss of war production, which forced the Germans on to the defensive. Even by the close of 1942 the enemy was forced to allocate to the western front almost half as many bombers and a greater number of fighters than were employed in the Russian campaign. As progress was made in this vital task, and as the power and accuracy of the Allied bombers increased, it became practicable to plan and execute, in preparation for the coming invasion, a concentrated and systematic campaign against the enemy's systems of supply and transportation.

But although no appreciable damage was caused to German communications before 1943, the desirability of this form of attack was recognized from the beginning of the War. It first arose seriously during the Battle of France in 1940. Owing to the very small size of the force available at that time and the complete absence of heavy bombers, the damage caused to enemy rail facilities, bridges, canals, etc., was negligible and was easily repaired or circumvented. Our casualties in those operations were very severe, by night as well as by day. During the remainder of 1940 and 1941, operations had to be carried out almost entirely by night, and increasing opposition, particularly from flak, obliged our aircraft to fly at heights at which accurate bombing of small objectives was seldom practicable except under ideal conditions of visibility and full moonlight. No great improvement was made until we had many more heavy bombers, and until accurate radar aids for blind bombing were produced. This was the situation when, in June 1941, the Germans launched their campaign against Russia. During the next four months Bomber Command was given the task on high priority of carrying out a series of attacks aimed at the German railway system. The chief objectives were nine important railway centres in the Ruhr-Rhineland area and, with other railway targets further afield, these operations absorbed nearly half the total effort of the Command for the whole of 1941. In relation to the great efficiency and the huge extent of the German railway system, however, the bombing at that time had no lasting effect. We had ourselves found during "the Blitz" how comparatively easy it was to repair all but the heaviest bomb-damage to railway tracks and, like ourselves, the enemy soon developed a very efficient railway repair organization. At the beginning of 1942, when plans were revised in preparation for the main offensive which for more than two years was to be our only means of attacking Germany, the position was as follows.

The Germans had at their disposal virtually the whole vast complex of European communications. The elaborate, interrelated network of road and rail, inland waterway and coastal shipping routes was under their control from the Bay of Biscay to the Black Sea, and from the Mediterranean to the Arctic Ocean. It is true that the enemy's use of road transport had been greatly curtailed as a result of the shortage

of fuel and tyres, but in any event the road system could be largely disregarded from the point of view of strategic bombing. The German inland waterways—both canals and rivers—were always of great importance for the transport of heavy goods, especially for the Swedish iron-ore needed by the Ruhr, and the Ruhr coal needed by the rest of Germany. However, repeated attempts at blocking the Dortmund-Ems Canal had shown that a small bomber force could damage such a system only at a prohibitive cost. Moreover the effect was transitory unless accurate attacks could be pressed home at frequent intervals to keep pace with repairs. For such reasons the inland waterways were not seriously attacked until the last year of the war, when the Dortmund-Ems and Mittelland canals were cut with decisive effect.

#### SEA COMMUNICATIONS

The enemy's sea communications were of the highest importance to him both in themselves and because they afforded a possible means of relieving the pressure on the inland waterways and the railway system. The last war was the first in which the Germans were confronted with the task of keeping a very long coastline provided with supplies vital to defence and utilization. Whereas in previous wars they had only a short coastline to protect, in the last war geographical conditions favoured hostile action by our naval forces and, above all, by our bombers. For the first time the Germans experienced the far-reaching effects of air attacks by bombs and mines on their sea communications, particularly in areas inaccessible to our naval forces. In this direction bomber operations had an immediate effect from the earliest days of the War. During 1941 the Blenheim Squadrons of No. 2 Group carried out low level attacks in daylight on German shipping from Norway to the Bay of Biscay. This little campaign, pressed with the greatest dash and gallantry, resulted in the loss of more than seventy ships sunk and nearly as many seriously damaged within a period of about half a year. But, as a result of this success, flak and fighter opposition increased, and losses on our part were not light. It was therefore decided to concentrate our effort upon mine-laying by night.

#### AIR-BORNE MINING

This method of attack, carried out first in 1940 by No. 5 Group of Bomber Command, had already yielded valuable results, and in February, 1942, when Sir Arthur Harris, who had previously commanded that Group, became C-in-C. Bomber Command, he intensified the minelaying effort by extending this work to the other night-bomber Groups. From that time onward, an average of 1,100 mines were laid per month. This was achieved without diminishing the weight of attack against the main objectives in Germany by taking advantage of weather conditions unfavourable for bombing. Thus, with the exception of a small number laid by surface craft, mainly in the Channel, Bomber Command became responsible for all minelaying in enemy waters from the Eastern Baltic to the Spanish frontier. Operations were directed against a number of areas in the main enemy shipping routes, selected by the Naval Staff with the object of causing the maximum interference with his seaborne traffic and, at the same time, forcing him to indulge in protective measures costly in men and material. In the latter part of the War, more than 40 per cent. of the total personnel of the German Navy were absorbed in this unproductive and purely defensive role.

The effect of the sea-mining offensive was of course cumulative. From 1942 onwards the mining of the Baltic caused the enemy grave concern and, by interfering with the naval training zones, had a considerable effect on U-boat operations.

U-boats, depot-ships, trooping liners, train ferries, and many of the enemy's minesweeping and escort vessels, were among the 590 ships sunk and 473 damaged by air-borne mines. Even main naval units were not immune and the battle-cruisers "Scharnhorst" and "Gneisenau" both sustained damage from mines laid ahead of them when those ships made their dash from Brest in very bad weather to the supposed safety of Kiel. But the greatest number of casualties were suffered by the irreplaceable general cargo vessels, tankers, etc., which were vital to the enemy's seaborne supply system. Such operations as the mining of the Kiel Canal and the Heligoland Bight were also particularly valuable in imposing enormous delays in shipping arteries of importance to the German war effort. It was as a direct result of air-borne mining of the Baltic that Sweden withdrew all her merchant tonnage from the German trade in the late Summer of 1944, and the continuation of the offensive brought Baltic shipping—such of it as remained afloat—virtually to a standstill by the close of that year.

There can be no doubt that the persistent, unspectacular sea-mining offensive was one of the most successful and economical contributions made by heavy bombers to the Allied victory. These operations, however, required great skill and determination, and were not carried out without painful losses; but their repercussions were far-reaching. Even now we do not know the full story. To give but one example of its effect, we have only to remember the success of the minelaying campaign in sinking and delaying the enemy's much needed supplies of high grade iron ore from Norway and Spain. Eventually the shipping situation became so desperate that much heavy traffic had to be diverted on to the overburdened railways, and thus, instead of relieving them, contributed to their downfall.

#### RAILWAY COMMUNICATIONS

And so we turn to the vast railway network which was the backbone of the enemy system of supplies and transportation. The important part played by the *Reichsbahn* in the German war effort was foreseen as far back as the time of Bismarck, who originally planned its great strategic lines, and the Nazis had not overlooked its importance. When the long sea-routes from the North Sea to the Mediterranean were closed by the British control of the Straits of Gibraltar, a large additional load of heavy traffic was thrown upon the railways. This included, for instance, the despatch of a million tons of coal monthly across the Alps to Italy.

Owing mainly to the bombing of their industrial centres, the Germans had insufficient vehicles, fuel and tyres to make extensive use of long distance motor transport for war equipment and other heavy traffic, and the railways had to carry a further large burden directed off the roads—those fine *autobahnen* of which Hitler had expected so much. As a result of all this, the State Railways had to carry about 80 per cent. of all goods traffic in Germany, but at first they proved equal to the task.

Experience of enemy bomb-damage in this country, and the lessons learned in our own early attacks on Germany, had shown that the disruption of a large and efficient railway system is a very difficult problem, and one which a small and inadequately equipped bomber force could not solve in the face of strong opposition. In the early days, therefore, it was plain that for the time being enemy rail communications could only be attacked profitably as an incidental part of the long-term plan to destroy the main centres of German war industry. Fortunately, those targets contained large concentrations of railway facilities, especially engine depots, repair and construction shops, marshalling yards, etc.

About this time the Germans faced their first transportation crisis. Failure to achieve victory in the West before embarking on the unexpectedly protracted campaign against Russia had stretched the enemy rail organization far beyond its normal limits. This might have been overcome had it not been for the fact that the Russians, having first seized a large part of Poland's railway equipment in 1939, succeeded in withdrawing eastwards all that and most of their own rolling stock in 1941. The Germans had not enough locomotives to meet the immense demands made upon the transport system during the first long and very severe winter of the Eastern Campaign. Extremes of frost, and the activities of partisans, caused a very high wastage rate.

The grave view which the Nazis took of the position was publicly revealed in the spring of 1942. Hitler then admitted the crisis in rail transportation which had occurred during the terrible Russian Winter of 1941-42. The Army and even the *Luftwaffe* had had to go short. Goering and others promised solemnly that this would not be allowed to happen again. In March, 1942, therefore, the production of locomotives was accorded a priority equal to that of aircraft, tanks and U-boats. The intention was to build some 7,500 locomotives of a standard, simplified design within one year. At that time German industry had not yet been seriously affected by bombing and, with the steel and heavy engineering works of France, Belgium, Czechoslovakia and Poland at his disposal, as well as his own, the enemy must have felt certain of achieving the required output in time. In fact, the building programme was so delayed and slowed down that the locomotives needed for the campaign in Russia were not produced in anything approaching the required numbers till an advanced stage in the evacuation of Russian territory, a year too late. The facts which follow show that strategic bombing can justly claim to have contributed substantially towards this decisive German failure.

#### LOCOMOTIVE TARGETS

By the end of 1943, eight major plants in Germany and France engaged on the locomotive building programme had been hit and most of them severely damaged in the course of the bomber offensive—among them the two largest and most important in the whole of Continental Europe. These eight plants were responsible for nearly half of the total output of factories under German control.

The details are as follows:—

Henschel (Kassel)	...	...	All three works severely damaged.
Krupp (Essen)	...	...	Huge locomotive construction hall completely gutted and work abandoned.
			Heavy damage to other railway equipment workshops.

Borsig-Lokomotivwerke (Berlin)		Serious damage.
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Krauss-Maffei (Munich)	...	Moderate damage.
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#### *French Locomotive Works damaged by bombing.*

Schneider (Le Creusot)	...	...	Loco. section heavily damaged.
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"Batignoles" (Nantes)	...	...	All shops damaged.
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Denain	...	...	...	Successful attack by No. 2 Group.
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Fives-Lille	...	...	...	Damaged by No. 2 Group in Autumn 1941.
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Further damaged by U.S.A.A.F. later.

In addition, less serious damage was inflicted on the locomotive works of Cockerill (Liege), Skoda (Pilsen), and Berliner Maschinenbau (Berlin) in the course of bombing operations in 1943. A further important point in regard to the slowing

down of the locomotive construction programme was the fact that the assembly shops relied largely on axles, wheels, tyres and other parts supplied from a variety of engineering factories, many of which had suffered from the bombing of industrial centres in 1942 and 1943.

Meanwhile serious bomb damage to repair and maintenance depots in Germany and France interfered with the facilities for keeping the existing locomotives fit for service, and lengthened the average period during which each locomotive had to be withdrawn for servicing or overhaul. While the short range light bombers of No. 2 Group executed a number of skilful daylight attacks on repair shops in Northern France, for instance at Tours, Aulnoye, Le Mans, Hellenes (Lilles), Rouen and Rennes, good results were obtained by the night bomber force at important German rail centres as well. An outstanding incident occurred at Berlin, where, on 1st-2nd March, 1943, the Tempelhof railway workshops were completely devastated by fire. The Tempelhof works were the second largest of Germany's repair depots, and the damage covered more than 22 acres. A large number of locomotives and much rolling stock and equipment was lost to the enemy as a result of this attack. The Nippes repair workshops at Cologne had been practically destroyed as far back as May, 1942, in the course of the first "Thousand Raid," and all the railway centres at Cologne suffered very heavily in the Summer of 1943. Indeed, almost every time an important German town was successfully attacked, railway facilities were hit and repair and storage plant suffered. As an example, one of the attacks on Munich may be quoted. In the operation of 9th-10th March, 1943, the shed for servicing electric locomotives (at Munich/Laim) was burnt out, and reconnaissance showed 21 fire-damaged locomotives in the ruins, while an adjoining round-house for steam locomotives also suffered severely. Owing to damage to the electric-traction system here, traffic on the Brenner Pass route to Italy was entirely stopped for three days, and normal working was not restored until 16 days after the attack.

The preparations for the locomotive building campaign were, however, too thorough and the industrial priority accorded to the work too high for us to prevent the planned output being achieved eventually—unless we were to devote an undue amount of effort to this end. Even by the Autumn of 1943, the planned rate of production had not quite been attained, but by that time the Germans were abandoning Russian territory wholesale, and the need for the locomotives had disappeared. They had come too late.

#### PRE-INVASION AIR OFFENSIVE

Six months after this, in March 1944, an important new phase began, involving full-scale operations against German rail communications between the Channel and the Rhine in preparation for the Allied invasion of the Continent.

During the years following Dunkirk and the collapse of France, the Nazis had endeavoured to persuade the world that their conquest of Europe was irrevocable. The might of the *Wehrmacht* and the fortifications with which the Todt organization had enclosed the coasts of France and the Low Countries were to have guaranteed the permanence of Hitler's empire. The enemy may have been right when he declared that never before in history had so powerful a fortress been created. Nevertheless, the *Festung-Europa* had no roof—and the Allied bombers took full advantage of that fact. While the *Wehrmacht* was dissipating its strength in the East, years of steadily-increasing heavy bombing withered the heart of the German Colossus. Hundreds of war factories were rebuilt only to be bombed again, while

one industrial and administrative centre after another was methodically reduced to ruins. The *Luftwaffe*, outnumbered and outfought, was reduced to a purely defensive role.

At length, when it became clear that the Allied armies were about to re-enter Western Europe, Goebbels admitted the possibility that the "impregnable West Wall" might be breached at some points, or even taken in the rear by airborne landings. But the Germans, he said, were fully prepared for this. Indeed they actually welcomed the prospect of again getting to grips with Allied troops so that they could then hurl in their large-scale mechanized reserves, held ready for this purpose, and drive the invaders back into the sea—as they had done at Dieppe, and as they nearly did at Anzio.

Early in 1944 it became certain that the German counter-invasion plan relied on the swift arrival in the battle area of powerful reinforcements brought to the scene of action by rail from central positions. It was clear that the success of the invasion would be prejudiced unless the possibility of swift and powerful reinforcements by rail was denied to the enemy. As an essential preliminary, therefore, the air forces were called upon to cripple the whole railway system from the Rhine westwards to the Brest peninsula. In order to avoid giving any indication of the landing places which we proposed to use, it was necessary to attack the railway systems over a very wide front, including Belgium and the whole of the northern part of France.

In spite of its reduced efficiency at this period, the French railway system was capable of meeting all German requirements for military and economic traffic. As German traffic had all priorities on French railways it was impossible to affect enemy interests without attacking the rail network as a whole. This network was particularly complex, providing alternative routes in every direction. From the military point of view, points of blockage could be avoided with comparative ease. It was certain that the breaking of rail tracks by bombing, even on a large scale, would have only a temporary effect—especially since our attacks on Germany had given the enemy as much practice as he could wish for in the speedy repair of such damage. That the enemy was taking no risks in this and other respects became clear early in 1944, when 17,000 German railwaymen (in addition to 6,000 already there) and much equipment were sent to France with a view to maintaining the French system during the expected period of strikes, sabotage and bombing.

The most effective method of paralysing a dense railway system is to bomb the "nerve centres" upon which it is peculiarly dependent. At these centres the all-important locomotives are housed and repaired, and the operating and servicing organizations are there concentrated in a small area, together with much valuable equipment. The primary object of the pre-invasion plan was, therefore, the *destruction of rail motive power* through the bombing of locomotive depots together with their associated repair and maintenance facilities. Any damage to marshalling yards, rolling stock, or through main lines was to be regarded as a welcome but incidental bonus.

A comprehensive plan was prepared with the advice of transportation experts. A total of eighty important railway centres in France, Belgium and Western Germany were listed for attack by Bomber Command, the U.S. Eighth Air Force, and the Allied Expeditionary Air Force. Of the three forces, Bomber Command was assigned the largest share, that is, just over half of the total number of targets. In addition, the Mediterranean-based 15th Air Force was allotted a number of targets

in South-East France, but for various reasons was unable to operate until shortly before D-Day. The campaign opened on 6th March, 1944, on the night of which the rail centre at Trappes, West of Paris, was successfully attacked. The full-scale pre-invasion operations, therefore, began exactly three months before the naval and land forces went into action. It is no exaggeration to say that the possibility of the invasion depended on the success of these air operations.

#### THE PART OF BOMBER COMMAND

As I can speak of it from personal experience, I shall deal particularly with Bomber Command's part in these operations, but that is not to be regarded as in any way showing a lack of appreciation of the great part played by the Eighth U.S. Air Force or the Allied Expeditionary Air Force. First of all many new problems had to be investigated before this important series of night operations could be undertaken. The most difficult of these problems was to estimate beforehand in each case the number of aircraft and bombs necessary to ensure that the vital buildings and most of the essential repair and operating facilities throughout the target area would be severely damaged. In view of possible vagaries of weather and failures of technical equipment, and the small size of the sub-targets which were the real objectives, it was obvious that the estimated weight of attack would not produce the required result every time. The proportion of successful attacks could, of course, be increased by despatching more than the required number of bombs, but it was clearly preferable to send the minimum requirement since that would certainly prove fully effective in some cases and, owing to the large number of targets and limited time available, no bombs could be wasted. If not sufficiently damaged, the target could be attacked again. In fact, very few repeat attacks were necessary.

During the three months' campaign against communications up to D-Day, just over 62,000 tons of bombs were dropped by the four Allied Commands concerned, of which Bomber Command's contribution was more than 40,000 tons. Together with a further 27,000 tons dropped after D-Day, Bomber Command's contribution (67,000 tons devoted to the destruction of rail centres alone) equalled the total weight of bombs dropped by the Command during the two years of 1941 and 1942. In most of these attacks, which were carried out at night, the bombing accuracy was of a high, and in some instances an outstandingly high, order. Air photographs of some of the most important railway centres showed a complete wilderness, resembling nothing so much as a telescopic view of the extinct craters of the moon.

By D-Day, as a result of the combined offensive against rail centres, more than fifty of the targets were assessed as "damaged to such an extent that no further attacks were necessary until vital repairs have been effected." All but four of the remainder were "very severely damaged, but with some of the locomotive facilities still serviceable." In fact, this assessment proved to be an underestimate. An indication of the extent of the damage is afforded by the example of rail centres at Amiens-Longueau. The heaviest raids on this centre were carried out on 15th and 16th March, 1944, and involved a total of over 1,000 tons of bombs. As a result of these onslaughts the large locomotive round-house was completely demolished and both semi-roundhouses were damaged, one of them severely. Several locomotives were still buried under the debris of the main round-house six months later. Two turntables serving the round-houses were destroyed. The coaling tower and ash-handling plant were put out of action. The repair facilities were equally hard hit; the workshop buildings and nearly all the machine tools were destroyed, the generator plant was demolished and all three travelling cranes were immobilized.

The railway engineers estimated that it would require a minimum of a year to restore the workshops to reasonably efficient working condition, and then only if the necessary tools became available. Damage on a similar scale occurred at all the rail centres which were listed on D-Day as not requiring further attack.

Although incidental to the primary object of the campaign, a gratifying amount of German supplies and equipment was destroyed in marshalling yards. Two ammunition trains, for instance, were destroyed at Vaires, near Paris, in an attack at the end of March, and no less than three such trains were destroyed in the great Lille marshalling yards on another occasion. Unfortunately it was inevitable that a number of French civilians were killed in the course of the campaign, although every possible effort was made to reduce civilian casualties to a minimum.

#### RESULT OF PRE-INVASION OPERATIONS

The best indication of the success of the pre-invasion offensive against the enemy's rail communications is the fact that German major reinforcements reached the battle front too late to prevent the firm establishment of the invading armies in Normandy. When they did percolate through to the front, they found themselves operating in conditions of extreme disadvantage. Not only were they fighting under the shadow of overwhelming Allied air supremacy, against which their own fighters and bombers hardly dared to put in a fleeting appearance, but they were attempting to hold an advanced front behind which for two or three hundred miles the vital rail system was in a state of wreckage and utter confusion.

Investigation of the careful records of the French railway companies and comparison with German records have provided a detailed and reliable indication of the actual effect on the communications system as a whole. Owing to the bombing of rail centres the total capacity of the railways of the northern half of France—previously far in excess of the enemy's needs—had by D-Day fallen below the traffic level which had sustained his garrison troops prior to the attacks. During the Normandy battle, therefore, he had to try to maintain in the area, and actively employ, much larger forces on a traffic-level lower in capacity than that which he had used for his holding troops. From the records one can follow the immediate and pronounced decline of traffic flow which heavy attacks on the rail centres produced. In the northern, western and eastern regions of France the decline set in about the middle of March, and in Belgium became significant before the middle of April. It was everywhere greatly accelerated during May by the increased weight of attack. The destruction and exhaustion of locomotive power, and the loss of repair facilities, played an overwhelming part in reducing the railways in a very short time to a state which the French officials reasonably described as "paralysis."

The Region most heavily attacked before D-Day was that of the Nord. By the third week in April traffic entering this Region from outside France was barely 20 per cent. of its level in February, and of this practically all traffic other than expendable military materials had ceased. There was a continued but slower fall from that time until D-Day. It is interesting that out of a total of about 2,000 locomotives in the Region some 1,500, or 70 per cent. of the total, were out of service by D-Day. Furthermore, owing to the cumulative effect of operating difficulties it was not possible to use the remaining locomotives at more than about one-third of their normal capacity.

We can get some idea of what all this meant to the Germans from the post-mortem verdict given by the General Staff Officer who was responsible, under von Rundstedt,

for enemy communications in the West. In his view, our air offensive against the railways made a greater contribution to the defeat of the *Wehrmacht* in France than any other single factor. He pointed out that it had originally been planned to move troops at the rate of seventy-two per train per day to any specific point or sector and, before the bombing of the railways, he was quite confident that this could be achieved. In fact, however, during the invasion practically all rail traffic in the Seine and Normandy areas became impossible, and enormous diversions and delays both to troop movements and military supplies occurred over the rest of France. Even before the invasion it was impossible to move all the supplies needed. Except for V-weapon traffic, the whole of the "Todt" traffic ceased, and all construction work on coastal fortifications was stopped. Before the bombing, the total of all military traffic into France had exceeded 100 trains per day. Between sixty and seventy of these trains went daily to or through the critical area westward of Dunkirk and Paris, and North of the Loire. By the end of April the average had been reduced to forty-eight trains and by the end of May it had fallen to twenty trains per day. The responsible German staff officer attributed the whole of this traffic reduction to the attacks on rail centres.

Very large numbers of workers were employed on repairs to vital rail centres. At one Paris centre, for example, which had been attacked by Bomber Command in April, 3,700 men were employed for nine days after the bombing. 3,000 were employed here during the next two weeks, and during the subsequent three months the number fluctuated around the 2,000 mark.

On the average, through running lines were repaired within six days of heavy attacks on rail centres, but the destruction of the depots in which locomotives were housed, serviced and repaired, and the cumulative congestion of traffic could not be coped with. In spite of all their efforts, the Germans found that the loss of flexibility resulting from widespread disruption and congestion had reached the point where, on a specific occasion, it was impossible to squeeze even one divisional movement, coming from Belgium, through the Paris area.

As an example of the enormous diversions that had to be undertaken, one division of the German 15th Army was ordered to proceed from Holland to Normandy. Instead of being routed directly, it had to be diverted to Rheims at a maximum rate of eight trains per day. Rheims then became impassable, and they had to re-route via Dijon, hundreds of miles to the South, and then across central France to Tours on the Loire. There were examples of specific troop movements which the *Wehrmacht* required to effect at a rate of ten or a dozen trains a day, of which only two or three trains got through daily.

Since speed was a paramount necessity, a partial solution was attempted employing long distance road movement. Thus the 9th and 10th S.S. Panzer Divisions, coming from the Eastern Front, were detrained in the Nancy area and moved up some 400 miles by road to the front. Even so it took them as long to get from Eastern France to Normandy as it did from Poland to Eastern France. To move the "Adolf Hitler" Panzer Division to the Caen area from Louvain would have taken about three days in ordinary circumstances. In fact, although detraining took place near Paris and the move was completed by road, the rail journey alone took as long as a week for some elements, as a result of bomb damage on every route attempted. One unit was delayed for two days at a rail junction East of Paris which had been badly damaged by Bomber Command not long before.

Prisoners of war reported that they were usually exhausted on their arrival and

frequently went into action without rest or food. Many other instances could be quoted to show the chaotic conditions under which the enemy had to try to move his divisions, and their equipment and supplies. The chaos was further increased by a series of successful attacks on rail junctions, crossings and bridges, mainly carried out by the Allied Tactical Air Forces during the week before D-Day, and maintained after the battle had been joined in Normandy.

#### POST-INVASION ATTACKS

After the landing the main task of the heavy bombers was to seal off the battle zones from outside supply and reinforcement. The heavier attacks were made against the principal junctions in the following areas:— the Loire Valley; the area between the Loire and the Capital; the junctions in the Paris area; and junctions in Brittany through which traffic had to pass from the Brest peninsula. Together with a successful series of attacks on the rail bridges of the Seine and Loire, these operations virtually isolated the Normandy battlefield. In addition a large number of fighter-bomber sorties were flown by the A.E.A.F. against smaller junctions, bridges, trains, etc., within the same areas, and rocket projectiles were successfully used for damaging trains and for cutting tracks.

One of the most spectacular of this series of attacks was accomplished on the night of 8th-9th June by sixteen Lancasters, each carrying a 12,000-lb. penetration bomb. The aim was to block the main line from the South-West at the Saumur tunnel. One bomb penetrated seventy feet and exploded in the tunnel near one of the entrances. The tunnel was effectively blocked and remained so until it fell into our hands.

The German officer in charge of communications summed up the position after D-Day with the general estimate that "all movements took twice as long as the modest rates scheduled." He had previously warned von Rundstedt that after D-Day no rail troop-movements would be possible in the organized military sense. His warning was justified. He and his senior staff officers had followed the Allied air attacks on the railways very closely, attempting to forecast the next target. The conclusion often voiced at the time was, "We could not have conducted this offensive better ourselves"—a typically German compliment.

The lasting effects of this offensive are now widely known, for one of the most important problems of France to-day is the restoration of her railway system. For some time after the liberation of France the Central Government were unable to exert full political and military authority over wide areas, particularly South of the Loire, and those areas were unable to send supplies of food to relieve the severe food shortage in Paris and other towns in the North of the country. Looking back, it might be said that the bombing of railway communications had been overdone. Perhaps it was, but it must be remembered that the whole success of the invasion was at stake, and no risks could be taken.

During the preparations for invasion, the railway system in Germany itself was not directly attacked. In spite of many serious difficulties, to which the bomber offensive had greatly contributed, the organization had weathered various crises and remained able to meet the demands of the *Wehrmacht* and of the reduced German war industry. Throughout the Summer of 1944, the heavy bombers were fully engaged in preparing the way for and supporting the advance of the Allied armies, and at the same time strenuously attacking flying-bomb targets in Northern France. Indeed, during the five months from May to September, 1944, the German home

front had a respite from serious bombing. Other commitments, for example, absorbed over 85 per cent. of Bomber Command's effort during that period. Nevertheless, heavy attacks on Dortmund, Essen, Dusseldorf and Cologne in April and May had had severe effects upon communications. It is from the date of these attacks that, according to Speer, the German High Command first felt concern at the effects of attacks on home communications, seeing in them a threat to industrial production—"a threat that grew from month to month." The resumption of heavy air attacks, particularly on Western Germany, in the Autumn brought about a rapid deterioration of the railway situation.

These attacks were of three kinds. First, the complete and final destruction of most of the important industrial centres, especially those which were also important railway centres (for example, Cologne and the Ruhr). Secondly, attacks were directed against specific railway facilities, on the lines of the attack on the French railways, but with a more limited objective. Although these were principally the work of the U.S.A.A.F., lack of serious opposition enabled Bomber Command to attack vital small targets by day as well as by night under conditions which would have been impossible earlier in the War. Moreover a new radar navigational aid had come into operational use. Because it enabled considerable numbers of aircraft to attack small targets with very good results through cloud, the offensive was carried on effectively in weather which would otherwise have curtailed operations. This continuity of attack, even in the Winter when the enemy might normally reckon (and, as we now know, did reckon) upon a respite that would allow him to effect repairs, undoubtedly made a great contribution to the campaign.

The third class of bombing operation was the severing of the vital inland waterways—the Dortmund-Ems and Mittelland Canals. This was first achieved, in September, by specially-trained squadrons of Bomber Command, and repeat attacks kept these canals out of action until the end of the War.

The effect of the air attacks was at once evident on the total wagon loadings of the *Reichsbahn*. By the end of October, 1944, these had fallen by 20 per cent. as compared with figures for the middle of August. One important result of these mounting transport difficulties was a great fall in the despatch of coal from the Ruhr. On 11th November, Speer—the Reichsminister of Armaments and War Production—reported to Hitler that the deteriorating transport situation was seriously affecting the economic life of the Ruhr and, as a result of this, war production as a whole. The paralysis in coal distribution resulted in reserves for power stations falling to very low levels. The position of gasworks was particularly critical, as failure of fuel supplies from the Ruhr could not be supplemented from elsewhere. Many gasworks in Western and Central Germany had exhausted their supplies and had closed down. Numerous armament works were brought to a standstill, and the position was further aggravated by the success of air attacks on the most important centres of iron and steel production.

#### THE CAMPAIGN IN THE ARDENNES

From mid-December until well into January, the campaign in the Ardennes occupied the attention of the Allied Air Forces. Von Rundstedt's sharp counter-offensive, which opened on 16th December and from which the Germans hoped so much, coincided with a period of continuous and widespread fog and low cloud. Only in such conditions could the Germans hope to achieve success. Although weather made air operations exceedingly difficult, Bomber Command operated in

strength during the first week of the battle on four nights and twice by day, attacking enemy rail communications in the general area for the concentration of troops and supplies. These attacks, and others equally successful by the U.S.A.A.F., continued at maximum intensity until the German withdrawal was in full swing. These operations were designed to produce an immediate effect in the battle zone, and so were mainly tactical rather than strategic. Some of them were highly effective; for instance the night attack on 24th-25th December on the Nippes yard at Cologne. There nearly all rail tracks were hit, much rolling stock destroyed and the yard itself was 100 per cent. unserviceable next day. Owing to poor weather some of the other railway centres were less seriously damaged, but all lines running westwards from Cologne, Bonn, Coblenz and Bingen were affected in varying degrees.

A particularly successful attack was made on the vital centre of the enemy's road communications at St. Vith on 26th December. This was the hub of the road network in the eastern Ardennes and was attacked as soon as weather conditions were suitable. Prisoners of war subsequently reported that every road was completely blocked and that the cratered area was so extensive that it was not even possible to clear detours through side streets around the great piles of rubble in the centre of the town. After the attack, a German engineer battalion was employed for a week on the task of clearing a way through. During this period two divisions, one en route to support the attack on Bastogne and the other rushing to the defence of Vielsale, were forced to by-pass the town. The delay caused by the detour resulted in many units arriving at least a day late at their positions, and too late to dig in before the Allied counter-attack. The roads were only partly usable sixteen days after the attack, and the main roads were not in fact cleared until 3rd February—more than a week after the Allied occupation.

Troop concentrations at the road junction of Houffalize were also bombed on the night of 30th-31st December and again on 5th-6th January. The town was virtually destroyed and a wide area heavily cratered. It is known that considerable casualties and much confusion were caused.

#### THE LAST GERMAN OFFENSIVE

The effect of the air attacks on the transport of supplies for the last German offensive has since been admitted in the clearest manner by Germans concerned. "Transport difficulties were decisive," said Speer, "in causing the swift breakdown of the Ardennes offensive . . . the most advanced railheads of the Reichsbahn were withdrawn further and further back during the offensive owing to the continuous air attacks."

Von Rundstedt himself was certainly aware of the part played by the Allied bombers in encompassing his downfall and that of the Reich. He said: "Air power was the first decisive factor in Germany's defeat. Lack of petrol and oil (also due to bombing) was the second, and the destruction of railways the third. The principal other factor was the smashing of the home industrial areas by bombing."

Although the scope of Allied air operations and the choice of targets were determined by tactical considerations, the blows against Rundstedt's supply lines nevertheless brought about a further substantial fall in economic traffic in Western Germany. The attacks East of the Rhine, highly concentrated in time and space, against every type of railway installation, gave the *coup-de-grâce* to economic traffic originating in the Saar and Cologne areas. At the turn of the year the figures for wagon supply for all users in Western Germany were 67 per cent. lower than a year before.

Meanwhile, instead of providing an outlet for relieving the strain on the railways, the waterway system in the West was in a more parlous state than the *Reichsbahn* itself. The two chief waterways—the Dortmund-Ems and Mittelland Canals, were cut by bombing in September, 1944, and, by repeat attacks whenever necessary, were kept out of action until the end of the War.

By this time a new and very important factor had begun to operate decisively. Semi-finished products had to be carried over long distances, owing to the tremendous bombing of industrial centres, which had forced a policy of dispersal upon the enemy. The effect of attacks on communications had, therefore, an increasingly severe influence on the production of all kinds of armaments after October, 1944. Ultimately, delay in getting semi-finished products to the assembly factories progressively slowed down vital war production, until it came almost to a standstill.

With railway working virtually eliminated West of the Rhine, following the collapse of Rundstedt's counter-offensive, the systematic attack on the rail system East of the Rhine was resumed. After the middle of February, 1945, the Allied Air Forces combined in a great series of operations, the aim of which was the isolation of the Ruhr from the rest of Germany. From a military point of view, the general pattern of this air offensive may be compared to that which had isolated the Normandy battle-area nine months earlier. One of the most important contributions which Bomber Command made to this series of attacks was the completion of the ring of destroyed bridges on a wide arc running through Bremen and Minden to the Middle Rhine. In these operations three outstanding successes were scored by the employment of the heaviest bombs. Successful attacks by U.S. bombers, using 500 and 1,000-lb. bombs, had damaged the two parallel viaducts at Bielefeld, but steel girders were placed across the two spans affected, and the track relaid on them. Bomber Command aircraft, using the new 22,000-lb. bomb for the first time on 14th March, completely breached the twin viaducts at Bielefeld, one bomb bringing down seven spans in a heap of ruins. The Arnsberg viaduct which carried the main railway line over the upper Ruhr a few miles South of the Möhne Dam had been damaged in previous attacks, and was finally destroyed in one attack, using 12,000 and 22,000-pdrs., on 19th March. The Vlotho bridge was twice attacked with 12,000-pdrs. and, although still capable of repair, was rendered impassable. This meant that all three main rail routes to the East of the Ruhr had been completely cut, and would remain cut for some time.

#### THE FINAL PHASE

By this time, the Allied armies had closed up to the Rhine, and the bombers were called in to pulverize the last vestiges of the communications system behind the German armies on the East bank of the river. After weeks of preliminary pounding, Bomber Command made no less than seventeen heavy attacks during the one week ending 25th March, in preparation for and support of the 21st Army Group crossing of the Rhine North and South of Wesel. These comprised five attacks on railway centres, five on bridges, and seven attacks on enemy troop concentrations and strongholds. They were outstandingly successful in achieving their purpose, as messages from Field-Marshal Montgomery and other Commanders have testified.

Having crossed the last German defence line in strength, the Allied armies proceeded to occupy the devastated industrial areas, while the last remnants of organized resistance lying in their path were reduced to impotence by heavy air attacks by night and day.

Early in April, economic traffic in the still unoccupied districts of the Reich virtually ceased. In any event it had by now lost its significance as a factor in German resistance. Such bombing of the transport system as was carried out was done with a view to disrupting communications between the German armies in the East and those in the West, and between those in the North and the so-called "National Redoubt" in the mountains of Bavaria.

#### CONCLUSION

The experience of the war which has just ended has thus confirmed that there are two chief ways in which a powerful bomber force can contribute to victory. One way is the destruction of the vital industrial centres of the enemy country, and the other is by the systematic paralysing of all forms of communication.

In many ways the attack of communications is a more difficult technical problem than that of industrial centres, but it may well be that, in the future, nations will adopt a policy of dispersing vital factories and even putting them underground. Such a policy, though expensive and uneconomical in operation, is by no means impracticable if a country is prepared to devote sufficient energy and resources to its completion. If it should be successfully carried out, the industrial centres will cease to be vital targets, and the attack of communications will become the only way of reducing the enemy's war production.

In any event, the attack of communications will always remain an army requirement, and therefore I suggest that the methods whereby the German controlled system of war communications was reduced to unbelievable chaos will repay a careful study.

#### DISCUSSION

AIR CHIEF MARSHAL SIR R. BROOKE-POPHAM: The Lecturer indicated that the most effective form of attack on railway communications in France was to attack the big centres. How far was that due to the particular lay-out and operation of French railways, which I think are very largely dependent upon great railway centres round Paris, and did it apply to other countries such as Germany or Italy?

Then another question: a few days ago in Germany I was told that the limiting factor to railway transport there at the present time is not locomotives but railway trucks and wagons. Can the Lecturer throw any light on that from the point of view of our bombing?

THE LECTURER: With regard to your first question, I think it is true that railways vary in the degree of centralization under which they are organized. When talking to our own railway experts in this country during the planning of these attacks they frequently made reference to what would have happened to our own railways if certain vital marshalling yards and centres and locomotive works had been really successfully attacked by the Germans in 1940, which of course they were not. I was surprised to find how very important were places that I, as an amateur railway enthusiast, had scarcely heard of, such as the great marshalling yard at March in East Anglia—they were always worried by the idea of that being severely damaged. With regard to the German railway system, it was just as vulnerable as the French in the sense that it depended on very large repair and administrative centres such as Cologne, Berlin, Kassel, Munich and so on.

With regard to the other question, it is true that towards the end of the War the Germans did have a surplus of locomotives. Our attacks in the last year of the War were never specially directed against German locomotives, because they had planned for an enormous production of them for the campaign against Russia which became rather

redundant, especially as traffic had been reduced as a result of their withdrawals in the East. We did, however, frequently attack marshalling yards and places where we could destroy rolling stock.

AIR-MARSHAL SIR ARTHUR CONINGHAM: Might I ask if we have checked up whether the fusing of our bombs the whole way through was correct and if we got the best results out of it. Marshalling yards were often packed with trucks and we made holes all over the place; they were not able to move the trucks, but lots of them were undamaged. We got the impression that there was too much potholing; we certainly found it so with air-fields.

Would we have got better results by re-fusing our bombs—instantaneous bombs—and also smashing the surplus trucks?

THE LECTURER: Our standard fusing for railway centres of the marshalling yard type, going for rolling stock, was nose instantaneous, so that if there was too much holing it was because even that fusing was too slow. We did realize that if you had too much delay the bomb would probably go through one truck and blow that truck up, whereas if you did not go deep into the ground you might have destroyed half-a-dozen surrounding trucks.

The matter of fusing bombs was the subject of tremendous controversy throughout the War, and the experts disagreed with one another about most things (almost as much as economists do!). Generally speaking, in bombing marshalling yards we used nose instantaneous; for attacking things like round-houses, repair facilities, workshops, etc., we used  $1/40$ th of a second.

CAPTAIN E. ALTHAM, R.N.: Could the Lecturer tell us whether mine laying was used to interfere with inland water transport, canals, rivers and so on?

Another question: is it not sometimes rather difficult to decide whether it is sound policy to disrupt enemy rail and road communications when our own armies are advancing and we may require to use those same communications within a very short time? Does this not apply particularly to vital points such as large railway or road bridges? It would seem to require very nice judgment as to which is really the better policy, to deny their use to the enemy or to let him use them so long as he can in order that we may use them ourselves in the near future.

THE LECTURER: With regard to the mining of inland waterways, that was a most attractive proposition and many small mines were produced and some were put into the Rhine and other waterways, but they were not found very effective, chiefly because they had technical defects. Later on we mined inland waters, such as the Kiel Canal, with 1,000-lb. mines dropped from low-flying Mosquitoes on moonlight nights. It had to be done as low as possible for accuracy, yet it was no use dropping the mine from too low a height, because of its parachute descent—it is checked by parachute. There was a minimum height as well as a maximum height. However, that was successfully done a good deal towards the end of the War. With regard to the main canals, like the Dortmund-Ems Canal, we felt it would be better to attack by bombing rather than attempt to mine. Events, I think, showed that this view was right.

The question as to the advisability of destroying bridges or marshalling yards which you may want to use yourself, is of course one for the soldiers to decide. We act as their agents. Speaking now as an airman, I had the feeling throughout the campaign that what the soldiers—the Army Commanders—were weighing up was the importance of getting forward quickly and the casualties which would be caused in the battle against the convenience of afterwards having a particular bridge. I think that they generally felt it was better to make certain of advance by pulverizing the enemy's communications and preventing him resisting effectively, and so enabling them to get ahead with smaller casualties, and they were prepared to accept the inconvenience later, which of course could nearly always be made good by our engineers with pontoon bridges, etc. We had great resources compared with those in the hands of the Germans in the last years of the

War. Therefore the importance of destroying enemy resistance and getting forward nearly always outweighed the convenience of having facilities when the soldiers arrived on the spot. I think perhaps the Chairman, if he would be prepared to say anything on this subject, knows more about it than I do.

CAPTAIN H. F. NALDER, R.N.: Our strikingly successful bombing results prompt the question "to what extent were we hindered by the German defences?" In describing the very thorough anti-invasion preparations taken by the Germans, the Lecturer suggested that the lack of "roof" was a weak spot and this presumably refers to their general defence against air attack. Could you, therefore, tell us what is known of the efficiency of the German Air Force as regards defence? If we had been subjected to a similar attack at that date, is it considered our defence would have prevented similar successful results from being obtained?

THE LECTURER: The German organization was not quite the same as ours, in that all *flak* was an integral part of the Air Force. Otherwise it was organized on very much the same lines as our own. However, although nobody has a greater respect for the German defences than I have, as I struggled for over four years to outwit them, I think that if they had been as good as ours we should have failed. Many times our own night-fighter pilots have seen our bomber streams and referred to them as "an absolute piece of cake." They said if they could only find streams of German bombers coming over here as ours used to go over Germany they would get baskets full of them in no time. Whether you can discount some of that for their natural enthusiasm I do not know, but I think it is more or less true. By our standards I do not think the German defences were as good as they might have been.

I have read a certain amount of the confessions and diaries of German Generals and Air-Marshals and others since the War ended. The impression I have is that there was a great deal of muddle and a great deal of interference from the top by people who did not know what they were doing. For instance, Hitler insisted that all jet fighters should be turned into bombers because he had still a lingering desire to bomb this country and thought he could do it with jets. At the same time, every competent senior officer in the Luftwaffe knew that the only hope was to use those jets for defence. In many other ways they had decisions forced on them from the top by Goering, Hitler and others—by people who knew even less about it than those two, which made their work very much more difficult. In fact the famous German fighter ace, Major-General Galland, frequently contemplated committing suicide, and after reading some of their diaries I wonder that he did not.

COLONEL J. M. McNEILL, R.A.: I have two points.

First, as to enemy divisions being prevented from arriving on the battle-field, I think it was generally felt that it was a very difficult thing indeed to stop a division arriving on the battle-field; but both in Italy and Normandy they did not arrive in fit condition to fight. If I may quote one example from Italy: at the Anzio landing air reconnaissance showed that the German reaction had been very quick; they rapidly piled up a number of divisions against the beach-head, but the counter-attack on that beach did not come for a fortnight. I think most people attributed that to disorganization by air attack. In Normandy one heard continually of enemy units, such as signals and sappers, who had lost so much equipment on the way that on arrival they were given a rifle and employed as infantry.

Secondly, this question of whether to save communications so as to be able to use them afterwards. In most cases I think the soldier would prefer to make certain of winning his battle even at the cost of destroying communications which might be useful afterwards. It may be a point of interest, however, that in the projected operations in Malaya, just before the surrender, we felt we had won our major battle against the Japs and it was a question of taking over territory and getting installations going, and I think I am right in saying that there the air plan was not to destroy any communications at all in the area in which we were going to land.

THE LECTURER: I think it would be impossible by air attack to stop divisions arriving on a battle-field altogether. They will eventually percolate through but, as you say, they will arrive highly disorganized. As I have already said, prisoners-of-war stated that they arrived exhausted and starving and were thrust straight into battle. Also, formations often did not arrive as a whole, and very important elements of divisions might be stuck scores of miles behind, and frequently lost a good deal of their equipment on the way. Therefore the division, on arrival, was not a fighting unit but short of some of its elements. I think that is a very important point.

#### THE CHAIRMAN

I can perhaps add one or two remarks on the questions which have been raised. Firstly, the question Captain Altham raised about whether you should damage something that you may, or think you may want fairly soon. That of course is a question that was always arising. The people who raised it very often, who fought very hard about it, were of course the supply people. They would have preserved many enemy ports and many enemy railways and bridges. I do not know what would have happened if we had. I am quite sure the campaigns would not have gone quite the way they did. We very often had the argument. Sometimes it came up to General Eisenhower and myself and the answer was always quite flat: "We are not going to count any chickens before they are hatched." Our immediate aim is to stop the enemy and get forward. After that we will have to help ourselves."

With regard to the question about the railway system, the way I regard a railway system, or any transportation system really, is like a nervous system. There is something almost human, living, about it. That is true in many ways. You go for the nerve centre, or you go for the tips, and the effect, great or small, begins to spread throughout the whole system. If you go for the nerve centre—which in the case of a railway is the repair shops, servicing places, signal centres—of course the paralysis spreads quicker. The material damage you do—and this is a point the Lecturer mentioned—to trucks and railway locomotives is incidental. It is the system you are going for and not the bits and pieces. We had many arguments on the question of whether the enemy had plenty of locomotives or whether he had plenty of trucks. Personally I said many times: "I am not interested in all those guesses, because they are purely guesses. They are purely incidental." That is true of any railway system. We found it in Italy, we found it in France and we found it in Germany.

The possibility that France might have been particularly vulnerable to that form of attack was mentioned in the Discussion. I remember when it was discussed before we began it, one of the arguments against the policy was that as a result of the last war the French railway system was peculiarly designed to minimize the effect which would be felt if one or two centres were put out. Actually if you look you will find that there are a number of the most important centres which are right away from towns and are stuck out in rather peculiar places; so I think France was certainly not particularly vulnerable. Germany was the same.

One point was on the question of the thing being a living system and all one system. There is no doubt that the unexpected—unexpected to us—speed with which the final strangulation took place was due to the fact that the effect of the attacks in France, Belgium and Holland had spread and had begun to spread into the main system in the Reich. There is no doubt about that.

I think those are the main points. I am sorry to see so high a proportion of light blue in the audience, because I feel this question, if only from the historical point of view, is of immense importance to all the Services, and I may say to the civilians too.

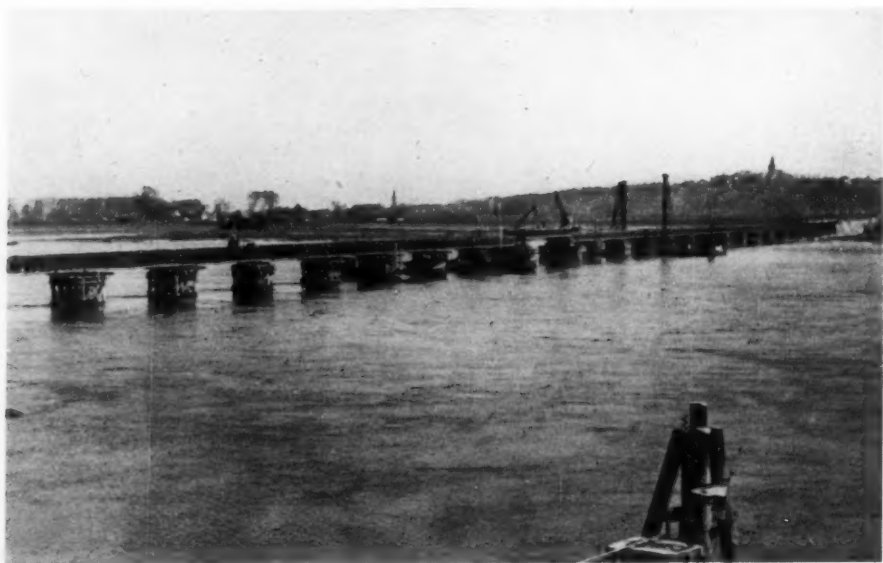
On behalf of us all I would like to congratulate and thank the Lecturer for his very interesting and very balanced account of the decisive operation, which is not easy to put simply and clearly because it is spread so wide.

The customary votes of thanks to the Lecturer and Chairman were carried by acclamation.





**SPANS IN POSITION AND READY FOR LAUNCHING**



**THE COMPLETED BRIDGE**

**A BRITISH BRIDGE ACROSS THE RHINE  
CONSTRUCTED AT SPYCK**

*From Official Photographs*

## A BRITISH BRIDGE ACROSS THE RHINE

By BRIGADIER R. F. O'D. GAGE, C.B.E., M.C.

**B**ETWEEN D-Day and VE-Day the Railway Construction Branch of the Transportation Service, Royal Engineers, completed the repair or construction of 122 railway bridges, of a total length of four miles, on the British railway lines of communication in North-West Europe. Almost the last bridge to be completed, and probably the most spectacular, was across the River Rhine at Spyck.

Long before D-Day it had been realized that the construction or repair of railway bridges across the Rhine was a probable commitment for the dim and distant future. By the end of 1944 the prospect was no longer so dim, and by early in 1945 the Transportation Service received definite instructions to be prepared to effect a rail crossing of the Rhine somewhere in the Emmerich area. The selection of this area, which was determined by the military operational plans and by inter-Allied boundaries, committed the Transportation Service to the construction of a new bridge at some point where there never before had been a bridge, and to the development of railway connections with the existing railway systems East and West of the Rhine.

Intensive examination of air photographs and intelligence data revealed that the water gap throughout the area was some 600-700 yards wide, 20-25 feet deep at normal level, with a current of three knots rising to a maximum of five knots. From the purely bridging point of view it appeared that one site was as good, or as bad, as another and the ultimate selection of a site would therefore be influenced largely by the work involved in constructing the approaches.

At Spyck, on the West bank of the river some three miles downstream of Emmerich, there is a chemical factory connected by standard gauge railway to Cleve station, three miles distant. Spyck therefore appeared to be the obvious choice, especially as the existing railway East of the Rhine is only one and a half miles away from the river at that point. By selecting Spyck not only would the need to construct a new railway to the West bank of the river be eliminated but, even more important, it would be possible to transport heavy materials and plant direct to the bridge site by rail. A decision was therefore taken to cross the Rhine at Spyck, subject to confirmation by reconnaissance that the site was suitable.

### PRELIMINARY WORK

Although a preliminary estimate of two and a half months had been given as the probable time to effect a crossing, it was evident that speed would be the essence of the contract, and the rapid establishment of rail communications across the Rhine might well be an essential factor in bringing the campaign to an early conclusion. Accordingly very great attention was given to ensuring that all the stores, plant, equipment and personnel needed for the project would be available when wanted. A preliminary design was prepared and steps were taken to ensure that everything likely to be required was actually available in Stores Depots, where it was "frozen," whilst stores and plant likely to be needed early were moved to a forward dump, some being held on rail under load. The necessary personnel, amounting to some 1,300 in all, were selected from units with wide experience of pile driving and girder erection and included a Port Construction and Repair Group

and Inland Water Transport units to provide expert assistance in watermanship and for the handling of the various tugs, ferry craft, etc. The craft themselves were concentrated at Nijmegen in Holland ready to move up the Rhine when it was clear of the enemy.

It was felt that, provided the spans were erected and launched from both banks, the rate of pile driving rather than girder erection would be the limiting factor, and a fleet of twenty Dukws was therefore obtained to ferry steelwork and other materials across the river in the absence of a road bridge in the neighbourhood. That all this planning behind the scenes was to pay a handsome dividend was clearly demonstrated later, for at no stage was work held up or delayed by lack of stores.

The Allied assault across the Rhine commenced on 24th March, but it was not until 4th April that the bridgehead had been expanded to include the Spyck area. Reconnaissance was started immediately and by the following evening, 5th April, a final decision was given to use the Spyck site. Work was commenced on 7th April.

Reconnaissance had revealed that the approach line to Spyck was only just above flood level and consequently it would not be practicable to construct the bridge at an elevation sufficient to permit of navigation by Rhine steamers under flood conditions. It was, therefore, decided to incorporate in the design one navigational span of 105 feet in mid-stream, which could be converted to a lifting span later. In addition to the construction of a bridge over the main river, the work of providing a complete rail link involved the clearance of wreckage and the construction of traffic loops in the badly damaged station of Cleve, heavy maintenance and repairs on the three-mile approach line to Spyck, repairs to the 342 feet span bridge at Griethausen which was damaged by shellfire, and the strengthening or strutting of a flood gap consisting of twenty spans of 66 feet between Griethausen and Spyck. On the East bank one and a half miles of new railway would have to be constructed, the earthwork for which was estimated at 50,000 cubic yards.

#### CONSTRUCTION

As finally designed and constructed the bridge is 2,368 feet long, comprising twenty-seven spans of 75 feet two-girder deck type Unit Construction Railway Bridge, one span of 105 feet four-girder through type Unit Construction Railway Bridge, and six spans of 35 feet R.S.Js.<sup>1</sup> The girders are supported on twenty-seven timber piled piers, six steel trestle piers and two timber raft abutments.

Immediately the decision had been taken to use the Spyck site, orders were issued to put the work in hand as already planned. The factory yard was laid out as a stores dump and a site was selected for the preparation of piles and other timberwork; two floating piledrivers which had previously been rigged at Nijmegen were towed upstream to Spyck, together with a fleet of landing craft, sea mules, Dutch tugs and powered barges; and stores and plant began to flow to the site in a steady stream by rail and road. Meanwhile surveyors were at work on taking sections and measurements, and draughtsmen were preparing site drawings.

The correct measurement of the gap and setting out of work were of primary importance, for it would, to say the least of it, have been awkward if the two halves of the bridge had failed to meet accurately in the middle. Responsibility for this work, and for checking alignment and distance during construction, was entrusted to a detachment of a Railway Survey Company.

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<sup>1</sup> Rolled steel joists.

The simple method of direct measurement could not be used owing to the width of the water gap. Accordingly base lines were laid out on each bank of sufficient length to give good intersecting rays, and the two points were located where the bridge line intersected the base lines. From these points the gap was measured, the difference in independent measurements from the two banks being 0.19 feet. This all sounds simple enough, but there were in practice many difficulties. For example, the East bank was heavily mined and no time could be spared to clear the minefield; the surveyors had to prod for, and remove, the mines on the lines along which measurements had to be taken. Several centre line pegs were fixed on each bank from which the bridge line could be produced as construction progressed.

Construction commenced with the preparation of bank seats, erection of steel trestles for the approach spans, and pile driving in the land piers using 19 R.B. Crawler Cranes fitted with false leads and a piling monkey. Concurrently, work proceeded on the assembly of a further four floating pile drivers mounted on Naval Landing pontoon rafts, which were made up on the site and launched from a slipway.

Pile driving in the river was started on 16th April, the piling rigs working out from each bank towards midstream. As the driving was completed in each pier, capping and bracing parties took charge and completed the pier, using 19 R.B. Cranes and air compressors mounted on Naval Landing pontoon rafts and derricks rigged on Dutch barges. Finally, temporary steel gantries were fixed in position ready to receive the girders and lower them into position. All the materials for this work were ferried or towed out in Dukws, which also transported all the girder parts required for erection on the far bank. In locating the pile piers, the two corner piles on the upstream face of each pier were accurately fixed; for each of these piles the deflection angles from the base line stations were calculated, each set of calculations taking about three-quarters of an hour. After some experience and refinements in the method of signalling it was found possible to position a pile driving raft in about fifteen minutes.

Signalling at night presented a problem. At first, telephones were laid from survey stations to the piling rafts, but cables were continually broken and telephones were abandoned in favour of coloured lamps; this method proved very successful on the system of red for "upstream," green for "downstream" and white for "in position."

Erection of the Unit Construction Railway Bridge spans proceeded concurrently on both banks. The 75 feet spans were bolted together in threes to provide a counterweight for launching, thus obviating the need for a launching nose, and were pushed forward by a 350 h.p. Diesel locomotive on the West bank and a bulldozer on the East bank. As each pier was completed a span was pushed forward, unbolted from its counterweight spans and lowered on to its bearings by chain blocks attached to the temporary steel gantries. The rail track was then laid, in readiness for the next launch. At last there remained only the 105 feet navigational gap. The U.C.R.B.<sup>1</sup> for this was taken out with the four girders erected as a deck span; after launching and lowering the girders were spread, cross girders and stringers were lifted into position, track was laid and all was ready for the test train. The job had taken one month.

During the construction of the bridge, work had proceeded on the approaches. Fifty-nine pieces of mechanical equipment were used to move 55,000 cubic yards

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<sup>1</sup> Unit Construction Railway Bridge.

of earthwork on the East bank approach lines; the main span of the Griethausen bridge had been repaired and tested and the twenty flood spans strutted with steel trestling; debris had been cleared from Cleve station and six running loops and a reversing triangle had been constructed.

The work proceeded smoothly from start to finish, working first in two twelve-hour shifts and later in three eight-hour shifts. Illumination for night work was provided from standard  $4\frac{1}{2}$  K.W. generating sets and a battery of diffused A.A. searchlights. The only delays experienced were caused by the weather. On two occasions high winds blowing upstream produced waves of such magnitude that the pitching of piles and pile driving were impossible, and on the last day a wind of gale force caused some anxiety whilst the 105 feet span was being launched; at one time the girders were deflected over a foot by the wind pressure.

Statistics generally make dull reading, but the following indicate the scope and complexity of the problem. A brief indication of the work involved as disclosed by these figures shows that the completion of the task in one month was a creditable accomplishment.

#### BRIDGING

Length of new girders—Wet gap	...	...	1,900 feet
Length of new girders—Dry gap	...	...	440 feet
Repairs to Griethausen Bridge	...	...	342 feet
Strengthening approach spans 20 x 66 feet	...	...	1,320 feet
TOTAL length of bridging involved			4,002 feet

#### PILING

##### Wet Gap :—

- 20 piers of 16 piles each
- 2 piers of 24 piles each
- 2 piers of 34 piles each

##### Dry Gap :—

- 2 piers of 16 piles each
- 1 pier of 9 piles

TOTAL 477 piles (average length 60 feet, average penetration 20 feet)

Steelwork erected and fixed	...	...	1,200 tons
New railway track laid	...	...	2,750 yards
Earthwork	...	...	55,000 cubic yards

##### Number of men employed :—

Royal Engineers	...	...	760
Pioneer Corps	...	...	597
R.A.S.C.	...	...	29

TOTAL ... .. 1,386

Total Man-Hours ... .. 344,442

(Excluding supply and delivery of materials, but including approaches and ancillary works.)

## CONCLUSION

The announcement of VE-Day on the very day on which the bridge was completed came as something of an anti-climax and was received with mixed feelings by the men on the job. To some extent they had been cheated of their rewards, for the bridge could not now be used for its primary purpose—the support of military operations against Germany. The fact remains, however, that it was a fine engineering achievement and it has proved of inestimable value for post-hostilities traffic. A flow of twenty-one military stores and personnel trains each way passes over it daily and tens of thousands of B.L.A. leave personnel have gone across it on their long journey to and from the Channel ports. At each end of the bridge stands a notice board which reads "VICTORY BRIDGE".

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## THE BATTLE FOR LEYTE GULF

By CAPTAIN K. M. McMANES, U.S.N.

On Wednesday, 31st October, 1945.

ADMIRAL OF THE FLEET LORD CHATFIELD, P.C., G.C.B., O.M., K.C.M.G., C.V.O.  
in the Chair.

THE CHAIRMAN, on introducing the Lecturer, said that Captain McManes had commanded a destroyer flotilla in the Battle of the Philippines and had served with distinction in that engagement.

He was at present, commanding the U.S. Naval Group, France.

### LECTURE

**M**OVEMENTS of major Japanese fleet units northward from the Singapore area were detected on 22nd and 23rd October by submarine scouts off Palawan Island, and our submarines attacked the enemy force and sank two "Atago" class heavy cruisers and severely damaged a third. To meet possible threats to our invasion area on Leyte Island, ships of Admiral Halsey's Third Fleet were moved into position East of the Philippines off Surigao Strait, San Bernardino Strait and the Polillo Islands off South-East Luzon.

Carrier search planes on the morning of the 24th discovered two strong Japanese naval forces moving eastward, one through the Sibuyan Sea and the other through the Sulu Sea. The force moving through the Sibuyan Sea included five battleships (thought to be the "Yamato," "Musashi," "Nagato," "Kongo," and the "Haruna"), eight cruisers (two "Tone" class, two "Nachi," two "Mogami," one "Atago," and one "Noshiro") and thirteen destroyers. The Sulu Sea force consisted of two battleships, reported to be the "Yamashiro" and the "Fuso," two heavy cruisers, two light cruisers and seven or eight destroyers.

As soon as the presence of the two enemy task forces inside the central Philippines area was discovered, Hellcats, Avengers and Helldivers from Third Fleet carriers were launched to attack both forces. The heaviest attacks were directed against the enemy's Sibuyan Sea force by far the more powerful of the two. One of the Japanese battleships and a heavy cruiser were severely damaged by our planes. These two ships were left burning fiercely and may subsequently have sunk; at any rate, the force which that night made its way into the Pacific through San Bernardino Strait was reported to include but four battleships. In the carrier aircraft strikes at the Sibuyan Sea force, our planes also scored hits with bombs and torpedoes on three other battleships and three other heavy cruisers. A light cruiser was torpedoed, capsized and sank.

The Japanese force moving eastward through the Sulu Sea in the direction of the Mindanao Sea was also taken under attack by Third Fleet carrier planes, which scored bomb hits on both battleships. The cruisers were strafed and heavily attacked with rocket projectiles.

Meanwhile, our carriers East of the Philippines were under heavy attack by Japanese land-based planes. In this attack the U.S.S. "Princeton" (light aircraft carrier) was hit by a bomb and so badly damaged by a subsequent explosion in her magazine that she had to be sunk. In combat over our task force more than 150 enemy aircraft were shot down. Our plane losses were light.



THE PHILIPPINES  
SCENE OF THE BATTLE FOR LEYTE GULF.



During the afternoon of the 24th a land-based Navy search plane sighted a third powerful Japanese task force heading toward the Philippines. This force, comprised of seventeen warships, was first discovered about 200 miles off Cape Engano, northern Luzon, moving South from Formosa or home waters. In this force—essentially a carrier task group, were an aircraft carrier believed to be of the "Zuikaku" class, and three light aircraft carriers of the "Chitose" and "Zuiho" classes. In support of the carriers were two battleships of the "Ise" class, with flight decks aft; a heavy cruiser of the "Mogami" class; a light cruiser of the "Noshiro" class; three cruisers of the "Kiso" class and six destroyers.

By nightfall on the 24th, therefore, there were three large Japanese naval forces, representing possibly two-thirds of the Japanese naval strength, converging on the U.S. Third and Seventh Fleets protecting the invasion forces in the Leyte Gulf area. In the Japanese fleets there were eight, possibly nine battleships, four carriers, sixteen cruisers and twenty-six or twenty-seven destroyers. Many of the enemy ships in the two southern forces had been damaged during the day by our carrier aircraft, but their eastward progress had not been halted.

To meet these threats, made greater by the appearance of the Japanese carrier force to the North, Admiral Halsey concentrated several of his carrier task groups and started northward at high speed for a dawn attack on the enemy force off Luzon. Vice-Admiral Kinkaid's Seventh Fleet was left at Leyte Gulf to cover the Japanese forces steaming eastward toward Surigao Strait, between Leyte and Mindanao Islands, and San Bernardino Strait, between Samar and South-eastern Luzon.

#### BATTLE OF SURIGAO STRAITS.

Units of the Seventh Fleet, under the command of Rear-Admiral Jesse B. Oldendorf, were the first to join battle with the Japanese. To protect the southern entrance of the Leyte Gulf, through Surigao Strait, Admiral Oldendorf stationed a strong force of motor torpedo boats and destroyers at the narrowest part of the Strait and at their rear a concentration of battleships, cruisers and destroyers. The Japanese ships were sighted South of Bohol Island by motor torpedo boats about midnight of the 24th. The motor torpedo boats attacked and claimed torpedo hits. At 1.30 a.m. on the 25th the enemy fleet entered Surigao Strait in two columns, one about four miles astern of the other. Our motor torpedo boats and destroyers closed first with three torpedo attacks at 2.30 a.m., when the Japanese ships reached the vicinity of tiny Kanihaan Island off the West coast of Dinagat Island. Admiral Oldendorf's force of battleships, cruisers and destroyers was disposed across the North end of Surigao Strait, running East from Hinatungan Point, on Leyte's East coast. Admiral Oldendorf commanded our vessels on the left flank, while Rear-Admiral George Weyler, commanding battleships, was in the centre, and Rear-Admiral Russel S. Berkey commanded the right flank force of cruisers and destroyers.

The main fleet action began at 3.0 a.m. with the launching of torpedo attacks by our destroyers, which slowed the enemy advance from twenty to twelve knots. Our battleships and cruisers opened fire just after 3.30 a.m. By this time the enemy ships were more than twenty miles inside Surigao Strait. A wall of 16-in., 8-in. and 6-in. gunfire blasted the Japanese, all of the first salvos landing on the target. About forty minutes after the shelling began they started to retire. Unable to turn simultaneously, the Japanese warships turned in column. This manoeuvre brought them within 11,000 yards of the U.S. battleships' 16-in. guns. Our ships were

firing on fixed ranges and as each Japanese ship came by in line, our guns scored hit after hit. The enemy vessels were under cross fire so that our forces could hit them with guns and torpedoes at the same time. Ship after ship was hit by heavy salvoes.

Our force pursued the retreating enemy South to the end of the Strait, sinking a burning battleship—the “Fuso,” a cruiser and a destroyer. At dawn several Japanese ships were sighted burning. These were attacked by U.S. torpedo planes, which scored hits on all the damaged ships.

Our carrier planes, assisted by bombers from the South-West Pacific, continued the hunt for damaged Japanese ships through most of the 25th. Of the fifteen or sixteen enemy ships which entered Surigao Strait on the night of the 24th, only a heavy cruiser and five destroyers were still afloat by the evening of the 25th. These remnants of the enemy's Surigao force were attacked off western Leyte about mid-morning on the 26th by U.S. fighters and torpedo planes. Bomb and rocket projectile hits were scored on the cruiser and a destroyer. The cruiser, severely damaged, was seen to be down at the stern and circling at slow speed, while the destroyer was down at the bow, with her anti-aircraft guns silenced. The remaining destroyers fled to the South-West in the direction of Cebu.

#### BATTLE OFF CAPE ENGANO

While the battle of Surigao Strait was in progress, units of the Third Fleet had been steaming North through the night at full speed. The Japanese carrier task force off southern Luzon was caught so completely by surprise that there was no effective air opposition to our aircraft strikes early in the morning of the 25th. Many of the Japanese carriers were caught with only a few planes on deck. Japanese carrier aircraft, which had been refuelled ashore in the Philippines, flew out later in the morning to join their ships, which had already met disaster. The enemy planes arrived too late to get into the battle; twenty-one of them in futile attacks on our ships were shot down by our combat patrols.

The Third Fleet sank at least seven of the seventeen ships which comprised the enemy's carrier task force. Carrier aircraft sank the large “Zuikaku” class carrier, two carriers of the “Chitose” class, and a destroyer. A carrier of the “Zuiho” class was crippled by our planes and was later sunk by gunfire of our cruisers and destroyers. A cruiser was severely damaged by carrier planes and was sunk during the night by one of our submarines, while a second cruiser, or large destroyer, was sunk by gunfire during the battle. Heavy damage was inflicted on both battleships, one of which was hit by two to four torpedoes and many bombs; three cruisers and four destroyers were damaged by bombs and gunfire. None of the Third Fleet ships engaged with the enemy carrier force was damaged. Our only losses in this phase of the action were ten planes, eight pilots and ten air-crewmembers, downed by anti-aircraft fire.

#### BATTLE OFF SAMAR

Before the enemy ships which had been damaged off Luzon could be tracked down and destroyed, the engagement was broken off by the Third Fleet in order to go to the assistance of the Seventh Fleet's carrier escort groups, then under attack off Samar Island by the Japanese force which had succeeded in passing East through San Bernardino Strait. This large force of fast battleships, cruisers and destroyers, in spite of severe damage inflicted by our carrier aircraft on the 24th, had sortied during the night into the Pacific Ocean and was attacking ships of the Seventh Fleet. This enemy force appeared among Rear-Admiral Thomas L. Sprague's

escort carriers only seventy miles from our transports and landing craft, and began firing at almost point blank range at the vulnerable carriers. No match for the guns of the Japanese battleships and cruisers, our carriers took evasive action covered by smoke screens laid down by a destroyer escort and two destroyers, which then, in one of the most gallant actions of the War, dashed in to launch torpedo attacks at the enemy. For nearly five hours our carrier planes attacked the enemy force. Heavy damage was inflicted on the Japanese ships and, early in the afternoon, our force, now reinforced by heavy ships and carriers from the Third Fleet, drove the enemy to the North-West. Contact with the main elements of the fast Japanese task force was lost during the late afternoon.

In this battle most of the enemy's heavy ships were badly damaged by Seventh Fleet units, assisted by aircraft from the Third Fleet. One cruiser of the "Mogami" class was seen to sink and a destroyer was left dead in the water. The Japanese fleet, retiring North-West from the scene of the action, passed westward back through San Bernardino Strait during the early hours of darkness. A straggling cruiser was sunk by gunfire from ships of the Third Fleet about 2.0 a.m. on the 26th, before it could reach the Straits.

Aerial pursuit of the crippled enemy ships fleeing westward through the Sibuyan Sea was carried out through much of the 26th. In these attacks, shore-based aircraft of the South-West Pacific area joined with carrier planes of the Third and Seventh Fleets in harrying the Japanese warships. A "Mogami" class cruiser and a "Noshiro" class cruiser were sunk off Mindoro Island, a battleship was possibly sunk, and further damage was inflicted on three other battleships and three cruisers, damaged the day before off Samar.

The Japanese ships known to have been sunk during the battles were:—

On 22nd-23rd October—2 "Atago" class heavy cruisers, by submarine.

On 25th-26th October—Surigao Strait 2 battleships (the "Yamashiro" and "Fuso").

3 cruisers

6 destroyers

San Bernardino 3 heavy cruisers

2 light cruisers

1 other cruiser

Off Luzon

1 aircraft carrier

3 light aircraft carriers

1 cruiser

1 light cruiser or light destroyer

1 destroyer

Our losses were two CVE's, two DD's, one DE.

The Battle for Leyte Gulf resulted in a decisive victory for us. The Japanese Fleet was beaten and practically destroyed. It would not live to fight again another day in this war.

#### DISCUSSION

REAR-ADMIRAL H. G. THURSFIELD: I wonder whether Captain McManes is able to tell us what was the position of Admiral Halsey's Third Fleet? As I understand the narrative we have heard from him, it was principally concerned on 25th October with the force which was coming down from the North, from the direction of Formosa. The other Fleet was concentrated against the force coming through the Surigao Strait, so that the strongest Japanese force seems to have been unopposed except by aircraft,

and it has always been a little puzzling to me to know what the force available to Admiral Halsey was at that time.

THE LECTURER: I cannot tell you the position of his force, but he had, of course, a carrier group and he had his battleships and cruisers; in fact a force which greatly outnumbered anything that the Japs could put together at that time. Admiral Halsey did make a high speed run towards San Bernardino Strait, but arrived there a little too late.

REAR-ADMIRAL THURSFIELD: I always thought he was in process of doing that, but when they made their inexplicable break-off of the action, he turned back.

THE LECTURER: They ran back in too quickly. He arrived about eleven o'clock in the morning, just in time to catch that last cruiser going in.

REAR-ADMIRAL THURSFIELD: They may have been warned of Admiral Halsey's approach by land-based aircraft.

THE LECTURER: They may very well have had that warning, but the force that Admiral Halsey had was quite equal to anything that was available there; in fact, vastly superior.

ADMIRAL SIR RUDOLF BURMESTER: Would the Lecturer tell us whether the greater part of these actions were fought in darkness, and if so were the points of aim of guns and torpedoes obtained principally by radar or by searchlights?

THE LECTURER: The action in Surigao Strait was all at night. It began about one-thirty in the morning—that was the first sighting when they started entering the Strait, and the action was over just at dawn, about six o'clock in the morning. The Japanese used searchlights and star-shells. We used only radar.

The action off Samar began about four o'clock in the morning and continued until about nine o'clock. The action off Northern Luzon really began the afternoon before—in the late afternoon—ran through the night and continued until about six o'clock the following morning. That was about a five-hour run then for Admiral Halsey to get to San Bernardino Strait.

LIEUTENANT F. E. MEYNELL, R.N.: Could you draw any general conclusion as to why the Japanese were beaten? Was it because they were materially inferior, or was it because they were dispersed, or was their fighting efficiency far below that of your own forces?

THE LECTURER: This was the first time the Japanese had really put their Fleet out for a fight against our surface vessels since the Battle of Guadalcanal. They had, for some reason or other, kept their carriers in home waters and their heavier ships in Singapore. They used cruisers and destroyers for harassing our advanced echelons, but never put them out where there would be too much danger of their being sunk. Our submarines took a far greater toll of enemy combatant ships prior to this series of actions than had any of our surface ships.

You asked why they broke off the action. Were they definitely inferior? That, of course, is a conjectural question to which, at the moment, there is no answer. I hope somebody will be able to discover the answer in Japan. I think most of their officers who were in command that night were killed; certainly the waters in Leyte Gulf were filled with floating Japanese. After the first Battle of the Philippines—which was an air battle—you will remember the propaganda that the Japanese put out: how many ships of ours they had sunk, and no longer was the United States Fleet a threat, and that practically everything had been annihilated. The Japanese believed that; they took the word of their commanders. According to the Japanese, every time one of their aviators dropped a bomb he scored a hit and the ship subsequently sank. They carried these reports back and the people at home believed them. Whether the High Command in Japan believed them or not is difficult to say, but I think that, when the Japanese came up through Surigao Strait and San Bernardino Strait,

they intended to converge on Leyte, expecting only opposition from aircraft or from such few destroyers or cruisers as we might have left. They certainly did not expect to find six battleships in Leyte Gulf, nor did they expect to have Admiral Halsey's Fleet roaming the seas at will. That had been sunk because they had reported it so. That is the only answer I can give to your question, and, as I have said, it is purely conjectural.

REAR-ADMIRAL THURSFIELD: One other question, although I think you have really answered it. What is the reason why the Japanese came up from the Singapore direction in two groups? They must all, presumably, have started together, and they seem, when they sent off the detachment that came through the Surigao Strait, to have split into halves. That always seemed to me to be an inexplicable proceeding. The third force was obviously coming from a different place and was intended to join up on the scene of action. The first two may—in fact must—have started from the same place. Has there ever been any explanation, other than that which you suggested, of why they did not expect any naval opposition?

THE LECTURER: In order to give you the one explanation which I think there is for that, let me go back one step. The Japanese had obviously planned a co-ordinated air attack: that is an air attack on our forces in Leyte Gulf before their surface ships attacked. That failed. The air attack came, but not until after the battles for Leyte Gulf were over. On the afternoon of the 26th, we got a thorough-going dusting from their aircraft.

Why did they split? They came up from Singapore, joining up with a group of ships based at Brunei Bay, and then proceeded northward. We watched them off Northern Palawan, where they were seen for a period of about twelve hours, as the observer described it "just milling aimlessly about." Quite obviously this was a re-forming of the two Fleets, and it was designed so that one group coming up through Surigao Strait could have a clear field of fire at our ships close inshore at Leyte. If any of those ships succeeded in getting under way and steaming out, the force coming down from San Bernardino Strait would be there to cut off their exit. Also that force could stay outside and fire, and there was no danger of each group firing at the other, because they were at right angles.

That is the only explanation I can give, and I think they did intend to make a junction off Leyte Gulf at dawn that day.

CAPTAIN E. ALTHAM, R.N.: I should like to ask two questions. The first is, am I right in thinking that the night action against the Sulu Sea force in the Surigao Straits was the most vital of all these operations, because that force was very seriously threatening your landing-craft and transports, and this action intervened just in time to prevent it getting amongst them?

The other question is, should we be right in concluding that the backbone of the whole of the fighting was, in fact, the U.S. battleships, and if it had not been for those battleships the outcome might have been very different?

THE LECTURER: Answering your second question first, I agree that the battleships were the backbone, and the outcome might indeed have been different if they had not been there. What might have happened had there been an equal number of battleships on the Japanese side I do not know, although I still feel that we should have sunk them. If there had been an equal number on each side, or if we had not been able to cross the "T", I do not quite know what would have happened. Several factors entered in, all of which gave us a great feeling of confidence: we had some 16-in. guns backing us up through the action.

With regard to your first question, if we had not prevented the Japanese from coming in they would most certainly have wiped out the whole thing.

CAPTAIN ALTHAM: It would have been indeed a case of the cat amongst the canaries?

THE LECTURER: It would indeed, because here were our thousands of troops disembarking and our transport, and practically all the fuel that we had in the whole Central and South Pacific area was concentrated there. There were something in the neighbourhood of two hundred and fifty ships, all of them loaded as heavily as they could possibly be, and to have let the Japanese Fleet loose to hold target practice on that lot and then bombard our troops ashore, who would have been without any support whatever at that moment, could have been most disastrous.

GROUP CAPTAIN G. G. BARRETT, R.A.F.: I wonder whether you could tell us something about the air reconnaissance before the action? As far as I remember, the movements and composition of this Jap force were well known for some long time before they actually got into any action. Was this by shore-based or carrier aircraft, and did the Japs make any attempt to dispose of the shadowing aircraft? In fact did you shadow them the whole time or pick them up at intervals?

THE LECTURER: The chief reconnaissance of the force moving up from the South was done by submarines. They first sighted them and maintained contact, attacking the force wherever possible, and they scored many hits: they sank two cruisers and damaged others, but the force kept moving up. When the force got within reasonable distance of our carrier aircraft, they were shadowed, and aircraft went out to attack, not only to shadow. We did lose a small number of aircraft, but nothing compared with the damage they inflicted. As they came closer inshore, the matter of air attack was even simpler for us. Land-based aircraft were not used until after the action, when they chased the cripples.

It was primarily a battle of submarines so far as reconnaissance was concerned. You know, sometimes it is a little difficult for an air pilot to tell the difference between a cruiser and a destroyer, but a submarine commander looks through his periscope and he is pretty well able to tell what it is. We knew even the class names of the ships—a very accurate reconnaissance. We did lose one submarine which got a little over-zealous and, after launching her torpedoes, came to the surface to have a look, when a destroyer swooped down on her. She dived, and unhappily dived on to a reef. She was so badly damaged that her Captain beached her enough to get his crew off, and another submarine which was plying the same area came in and sank her.

GROUP CAPTAIN BARRETT: Might I, as a lifelong member of Coastal Command, take exception to your remark about our inability to distinguish between the types of naval vessels. But could you amplify your remarks about the submarine reconnaissance? Did they follow on the surface or pop up at intervals and have a look? Normally if submerged they could not keep pace. Did you have a whole string of them or rely on a few shadowing on the surface?

THE LECTURER: We had the area well covered with submarines. They were using radar and if the opportunity afforded they would come up and take a look. Most of the time they used ordinary submarine tactics—having a look when they could.

ADMIRAL OF THE FLEET LORD CHATFIELD: What I have always wanted to know is this: there was a moment when the American Navy was in a very difficult position, and when people over here were wondering what was going to happen, and then almost suddenly the tide turned and from that moment everything that you tried to do you succeeded in, and you steadily advanced thousands of miles at a time and accomplished your object. In doing that you had accumulated superior forces of all kinds; but was that wonderful advance that the American Navy and other forces made due entirely to the superiority in force or was it due, if you can say so with due modesty, to superior fighting efficiency and superior material? For instance, did you get the impression

that their ships were as difficult to sink as you might have expected? Were the three mines which hit one of your ships and still failed to sink her, inefficient, or was it that your own ship was so well built that she could stand it? In fact does the American Navy feel—or do you feel, is all I want to ask—that the Japanese really did prove themselves efficient seamen and had armed themselves with efficient vessels and efficient material to the extent that you might have expected? Perhaps you may not be able to answer that, but can you give us some sort of idea?

THE LECTURER: It is a very difficult question to answer, chiefly for the reason of the great reluctance all along of the Japanese Fleet to come out. We could not get them out for a fleet action, or even in small groups. Secondly, they were so taken aback after Midway in May 1943, that it really marked the turning-point. After that, things began to look up for us, as far as the Pacific War was concerned. We were in a desperate state in Guadalcanal, and if they had ventured one or two battleships down there at that time they could have worked us over; there is no question about that. But the fact remains that they did not do it. I cannot say why they did not do it, or why they turned around and ran when everything was in their hands. It is something in the Japanese psychology that if a plan goes awry they are not able instantly to swing round and move in some other way. I feel we are superior in our ability to adjust ourselves to rapidly changing conditions and to make quick decisions. I would also give credit—a great amount of credit—to our superiority of material. Our radar was greatly superior to the Japanese; the Japanese was developing fast, but ours was superior.

As to fighting ability, well, what can you say when you are engaged and the enemy, for no reason at all, turns and runs? He is not beaten, and he has you practically beaten as he did off Samar with our escort carriers. Maybe he wanted to save his ships because he needed them and could not get them repaired rapidly enough to protect the homeland if we were coming on. Even so, surely he must have known we would not be coming within the next few days.

I think the Japanese as a sea-fighter is good—as good as perhaps any other country's fighters, provided everything goes according to plan, but if you interpose some change, if, for example, you come upon him to starboard instead of to port, he does not at once think of changing over to starboard guns, he still wants to fire the port guns around the corner. It takes him time to adjust his mental processes.

Our fight in Surigao Strait is an example. When our first salvo landed, he immediately made a recognition signal, and he continued that recognition signal for several minutes and then opened up with a searchlight. We were on with radar, but his light served to check the point of fire, of course, quite nicely, and then one salvo landed near the bridge of this particular ship and threw open the door of the plotting station. Out poured a bright light from the inside, and it was not until our next salvo that the door was closed again.

I have no hesitation in saying that I think we proved ourselves quite superior.

#### CHAIRMAN

I am sure we are all grateful to Captain McManes for the most interesting lecture he has given us. In the Pacific Campaign, the naval forces of the U.S.A. played an overwhelming part. The loss of Singapore, the disaster at Pearl Harbour, and the inability of the United Kingdom to send sufficient naval forces to the Far East, enabled Japan to command the Pacific for a period. That command rendered possible her military victories. Few could foresee that she would lose it again so soon, and with its loss that all her military successes would be revenged. The rules of strategy once again ran true to history.

The action by night in the Surigao Straits, which the Lecturer has so vividly described, as well as the other information he has given us seem to me to indicate that the Japanese have not the basic qualities of British and American seamen. Their material was inferior

to that of their opponents; but so it would seem also, was their tactical use of it. Moreover their strategy appears to have been too "set" in its type and not to have been adaptable to the ever changing demands of sea campaigns.

That the U.S.A. should have been able, with the help of His Majesty's Dominions in the Pacific and increasing British naval forces, to recover what at one moment seemed an almost hopeless position, was a tribute to, indeed a revelation of, the immense latent power of that country and the efficiency and gallantry of her fighting men.

The Pacific Campaign will rank in history with the greatest military achievements of the past.

A vote of thanks to the Lecturer was then passed by acclamation.

## PROMOTION COLLEGE

By LIEUT.-COLONEL J. C. DAUKES, ROYAL ARTILLERY

**T**HE time has now come to consider post-war policy. One of the most important requisites which will contribute towards an efficient post-war Army is the necessity for well-trained and capable officers. The object of this article is to put forward a suggestion which, if adopted, will raise the standard of knowledge, capabilities and keenness of the younger Regular Army officer.

The present system of peace-time promotion examinations to attain the rank of Captain is inadequate. The examination itself lays little stress on a subject which has shown itself throughout this war to be almost the most important—the cooperation of all arms and Services. The examination involves work by the officer in his own time, often with the aid of non-military establishments at the officer's own expense; when compared with a more organized method of learning, this is uneconomical in time and effort; lastly, the examination provides little or no assistance towards the selection of the best for more advanced training.

In the past an officer had much leisure. In the future it is anticipated that he will find less time for private study; that his job will be in itself technically more difficult; and that a far greater knowledge of the workings of other arms and Services will be necessary, as war is becoming increasingly complicated. Further, a system of conscription is likely to be introduced, which again will tend to reduce the available time for leisure, as training will be more intense over shorter periods.

Before the War the selection of officers for the Camberley Staff College was not completely satisfactory. Selection used to be based on a difficult examination and on an investigation of the officer's record from his personal file, but not on any form of interview. Most keen Regular officers took this examination and its results very seriously. The examination invariably involved long hours of private study, again spent at the officer's own expense and in his own time. In principle, examinations should always be avoided whenever possible; they tend to produce an exam-minded officer who is not necessarily the best type. An investigation of an officer's personal file will be of assistance, but cannot possibly be infallible. It is suggested therefore that selection for such important training should be based on personal knowledge of the officer.

The two problems therefore appear to be: first to provide a system capable of giving the young officer a broader outlook, particularly with regard to other arms and Services; secondly to make the selection for the Camberley Staff College more simple and certain. If both these objects could be attained, it is thought that the young officer would appreciate the just and stern competition involved; and it is the competitive spirit which inculcates keenness and a desire for knowledge.

Both the above problems can be solved by instituting a short course of instruction for all non-technical Regular Army officers. The course would be open only to Lieutenants and would have to be completed before promotion to Captain was due. It would last about four months. Officers would not attend the course until they had completed five years of regimental training and until they had attained a good working knowledge of their own arm.

The course would be held at what for ease of reference will be termed the Promotion College. The object of the course would be to broaden the outlook of the

regimental officer, while at the same time ensuring that no officer was promoted to Captain unless he had reached a high standard in the work of all arms and the other Services.

In more detail, the syllabus of the course would be designed to emphasize the following four points: first, a working knowledge of other arms including administrative services; secondly, a broad knowledge of Royal Navy and R.A.F. matters; thirdly, a background of tactics; fourthly, a general background of very elementary staff work. The standard of instruction would of course be set according to the policy of the Army Council.

All officers, except those of certain technical arms, such as R.E.M.E., would have to pass through this course to be eligible for promotion to Captain. A second chance of completing the course might be allowed, but only where it is considered that an officer would benefit. If an officer is finally considered to have failed, he would be discharged from the Army.

At first sight the step of discharging an officer appears somewhat ruthless. It is suggested, however, that it is in the individual's own interests; if an officer fails (and there should be comparatively few failures) he is unlikely to get above the rank of Major, and his future is therefore uncertain. If he is discharged at the age of 25, as opposed to 42 or so, he stands a very much better chance of earning a living; in addition, an officer of 25 is less likely to be married and is therefore better placed to find employment.

At the end of each course a number of officers would be selected to attend the Camberley Staff College course, without further examinations; this they would do after a short return to regimental duty. This would provide a steady flow of the very best type of officer, selected as a result of personal knowledge of the officer's character; it would ensure an even more uniform background of knowledge.

The size of the Promotion College and the numbers it could accommodate would be dictated by the number of officers commissioned each year. On a pre-war basis, the number did not exceed 500. As officers will be serving in many countries, one additional similar college would be necessary, probably situated in the Middle East, if it be decided that the strategical reserve will be based there. The numbers to attend a four months' course would therefore be about 85. Even if this figure were increased to 120 (including selected officers from the Territorial Army and Dominions, officers from technical arms as advisers, etc.), it should not provide a serious problem to staff and run.

To sum up, therefore, it is suggested that a promotion college should be instituted; the objects of the course being to broaden the outlook of all officers with particular reference to other arms, administrative services, co-operation with the Navy and R.A.F.; also to provide a better system of selection for the Camberley Staff College. Requirements would be:—

- (a) One promotion college in England, and one in the Middle East.
- (b) Duration of course to be about four months.
- (c) All non-technical Lieutenants to pass through the course.
- (d) All officers, on successfully completing the course, to be eligible for promotion to Captain.
- (e) If an officer fails, he might be given a second chance; after finally failing, he should be discharged from the Army.

(f) Officers for the Staff College, Camberley, to be selected from among the best at the promotion college.

This system, if adopted, would ensure a high standard of proficiency on all military matters and a broad outlook on life; it would ensure fairness to the officer and be an added incentive to work; furthermore, it would offer a chance to remove the incompetent at an early age.

## MECHANIZATION AND MOBILITY IN OPEN WARFARE

By MAJOR A. J. WILSON, M.C., THE RIFLE BRIGADE

**D**URING the years immediately before the present war, when the re-organization and re-equipment of the Regular Army was being studied and discussed, the terms mechanization and mobility were leading cries of the moment. It was argued that increasing mechanization would lead to increasing mobility, and that the addition of further transport to war establishments would have the certain result of improving the manoeuvrability and handiness of the unit and formation concerned. The successes of the German Army in Poland in 1939 and in France in 1940 lent weight to the mechanization-à-outrance school of military thought, and the British Army which re-formed in England after Dunkirk was based on a wholly unprecedented scale of motor transport in the expectation that it would finally develop into an instrument capable of beating the Germans at their own game.

The mechanization policy bore splendid fruit in the victories of the Eighth Army in the Western Desert and in the relentness manner in which Rommel's Afrika Corps was hunted on its long retreat from Alamein to Tunis. Only an Army lavishly equipped mechanically and trained to think in terms of vehicles, as was the Eighth Army, could have maintained the momentum of the advance while dependent on such long and slender lines of communication. The Desert Army was an Army based on 'trucks' and composed of 'truck dwellers'; the individual soldier of whatever arm regarded his truck as his home and as an indispensable adjunct to everyday life.

It was not until the Eighth Army crossed to Italy, and there came the almost simultaneous landing of General McCreery's X Corps as part of the Fifth Army at Salerno, that the problems of a highly mechanized army became fully apparent. In North Africa the Egyptian and Libyan deserts, and to a lesser extent in Tunisia the wheat fields of the Goubellat Plain and Mejerda Valley, had permitted the free passage across country of all types of vehicles. Traffic blocks and congestion were largely unknown, except on rare occasions during the 'break in' phase of a battle before it became possible to unleash the 'armour' in open country. In Italy, on the other hand, the country was largely mountainous, and the few plains were cut up by frequent irrigation ditches and the inevitable vineyards of Southern Europe; consequently transport was almost entirely tied to the roads, and movement across country became a thing of the past. The road system of Italy, in itself inadequate for the uses of a modern army, was not improved by the thorough and systematic demolitions carried out by the retreating Germans. Both in the advance from Salerno to the Volturno and with the Eighth Army on the Adriatic Coast, traffic blocks became the order of the day, causing loss of time and temper to road users and seriously hindering tactical and strategical re-grouping.

The events of January and February, 1944, in Italy, however, were to show that not only was a highly mechanized army inclined in some circumstances to become enmeshed in its own maze of machines, but that a largely non-mechanized army, with its artillery for example almost entirely horse-drawn, was capable of re-grouping with remarkable speed to meet a new threat even in the face of complete enemy air domination.

The success or failure of the Anzio landing in January, 1944, depended in the last resort on the respective abilities of the Allies to build up and reinforce their bridgehead, and of the Germans to concentrate an army to meet the new situation. All the odds appeared to be in favour of the Allies. Kesselring's armies on the main front from the mouth of the Garigliano to the Adriatic at Ortone were fully committed against the Fifth and Eighth Armies, while such strategical reserve as was at the Germans' disposal was largely in the Florence area, and the necessary motor transport to transfer it to the area South of Rome seemed to be entirely lacking. Furthermore, the complete control of the skies enjoyed by the British and American air forces made it certain that the Germans would have to re-group not merely under the threat but under the actuality of continual attack from the air.

None the less, within ten days of the Allied landing at Anzio, Kesselring had succeeded in concentrating a powerful force to oppose the threat to Rome. At first content to contain the Allies, later, by a determined counter-offensive, Kesselring was all but successful in driving the invaders into the sea. Only the admirable resolution and skill of the British and Americans in face of considerable enemy superiority in numbers was able to prevent this, but the saga of Allied bravery and devotion which is now inseparably associated with the Anzio beachhead should not be allowed to obscure Kesselring's remarkable military achievement in conjuring up, almost out of thin air and with the assistance of a purely extemporized transport system, a new army which was to contain the Allies until the end of May.

If Anzio had shown the ability of a non-mechanized army to re-group rapidly under unfavourable conditions, the pursuit North of Rome in June, 1944, was to display the inability in certain circumstances of a mechanized force, even with complete command of the air, to close with and destroy a beaten army almost entirely lacking in motor transport and further handicapped by shortage of petrol. To the common soldier in an armoured division, June, 1944, was a study in frustration. Long queues of vehicles stood stationary on all the roads leading North from Rome or moved occasionally in clouds of choking dust a short and jerky journey forward. The opportunity to destroy finally the German armies in Italy was plain and was evident to the meanest soldier; that it was being missed was equally evident. The Army of Italy was tied with bonds of its own making; establishments of vehicles which had proved a boon and a blessing in the Desert now blocked every road and clogged every artery from Cassino to Perugia. Faced by this vast amorphous traffic block, the German Army managed to withdraw, covered by the lightest of screens only, relatively intact and unharassed except by air attack, to a concentration area near Florence. From there a re-organized force was able to move South and successfully oppose the Allies at the end of the month on a line running East and West through Lake Trasimene. No further opportunity of destroying the German armies in this theatre was to recur until April, 1945.

Thus the fighting in Italy went far to disprove ideas formulated in the Desert and elsewhere on the relationship between mechanization and mobility. Clearly the relation is not one of a simple arithmetical progression equally applicable to all theatres of war; it will be for the post-war soldier working against a more academic background and undisturbed by the pressure of operations to study the lessons learnt and attempt to achieve a suitable balance.

What, however, were the primary causes of the mechanized paralysis which so hampered the movements of the Allies in Italy? They can be simply stated:—

(1) A road system, in any case wholly inadequate for the needs of a modern army, further disrupted by skilful and thorough enemy demolitions.

(2) Excessive numbers of vehicles of all types using the various axes of advance.

(3) Indifferent traffic discipline on the part of the troops concerned coupled with insufficiently ruthless traffic control.

For the inadequate road system there was, of course, no immediate remedy except hard work; and no praise can be too high for the devoted, dangerous and practically non-stop work of the Royal Engineers during this period of operations. It is, however, worth while to examine the factors which caused excessive numbers of vehicles to use the roads at a critical period, for this was a state of affairs which could well have been avoided had it been possible to appreciate earlier the nature of the problem.

Bad traffic discipline speaks for itself; it was largely due to thoughtlessness and lack of understanding on the part of regimental officers and men and moreover was for the most part inexcusable in view of the insistence, both before and during the battle, of commanders and staffs at all levels on the need to keep the roads clear. The partial failure of the traffic control arrangements can be traced to a variety of causes, notably the shortage of provost personnel, the difficulty of communicating a rapidly changing 'picture' and scheme of priorities to a number of scattered policemen, and the natural reluctance of the police themselves to deal ruthlessly and on the spot with offenders of whatever rank against the traffic regulations. 'Double banking' for example, the cause of many a traffic block, would have been quickly stopped if penalized automatically by a three hour spell in a field before being allowed to continue the journey.

How could the number of vehicles using the roads have been cut down without affecting the efficiency of operational units themselves? These units in any case were operating on a light scale (in most cases less 10 per cent. of their war establishment) and could not have been further curtailed without detriment to their operational efficiency. Nor were the fighting units really responsible for the chaotic state of the roads, since by far the greater volume of traffic was employed on administrative duties.

This administrative traffic could possibly have been considerably cut down by a step which was never to my knowledge taken in 1944, though it was employed on several occasions in the pursuit to the Alps in 1945. Each vehicle of every unit carried five days' reserve of rations and a 100 per cent. reserve of petrol. What could have been simpler than to have stopped all replenishment except that of ammunition, which is never a problem during a pursuit, and forbidden the movement on the roads of R.A.S.C. vehicles within the Corps area? With the roads thus cleared, re-grouping would have been quickly and easily carried out. As it was, units carried five days' reserve rations and countless cans of petrol triumphantly from Cassino to Florence without ever having occasion to consume them, while the roads behind them were blocked by long convoys of replenishment vehicles bringing up the rations daily in the normal way.

Further congestion was caused on the roads by Corps and Divisional maintenance areas being often too far forward in a praiseworthy attempt to cut down the distance to be travelled on replenishment journeys by unit transport. But this entailed bringing forward a much larger number of load-carrying vehicles, thus blocking the roads nearer the front and causing the time spent on the roads by the drivers of unit transport to be as great, if not greater, than if they had travelled ten

or fifteen miles farther to the rear on a relatively uncongested road. It is worth noticing in this connection that the worst traffic blocks occurred at Cassino in 1944, when the Corps maintenance area was within six or seven miles of the battlefield, while movement was much easier in 1945 when events moved faster and long trips were made by unit replenishment vehicles back to maintenance areas which had been left well in rear of the pursuit.

Another factor contributing to the excessive quantity of transport moving in the forward areas during this period lay in the very large proportion of artillery which it was attempted to deploy. An A.G.R.A., for example, complete with headquarters, moved level with an armoured division, though there was small likelihood of its services being required until operations once more became relatively static; the nightly harassing fire tasks which were the main role of the heavy artillery during this period could well have been carried out by a troop of medium guns operating with the command of the divisional artillery concerned.

This excessive concentration of artillery with the forward troops during a pursuit is only one example of the laudable desire on the part of all units to get forward and see the fun! However laudable the motive, it cannot be denied that the rush to get on the road which starts as soon as operations become mobile is a menace to organized movement on the roads and needs therefore to be carefully controlled. Administrative units, in particular, should move as infrequently as possible and then by means of the longest possible bounds.

Finally, it would be difficult to find many cases of redundant vehicles in the actual war establishment of fighting units. Possibly the administrative tails of an armoured regiment and of an armoured reconnaissance regiment might both with benefit be cut down, notably where ammunition lorries are concerned, but such alterations would be but a drop in the ocean as affecting the main volume of traffic. It is in the control and movement of the existing scale of vehicles that the Army has most to learn. It was perhaps fortunate that, in the Spring of 1945, the Eighth Army had a solution of the traffic problem forced upon it by pressure of circumstances, since shortage of bridging equipment allowed for only two bridges over the Po. In consequence it proved a physical impossibility for unnecessary vehicles to get forward, with the happy result that thereafter traffic blocks were virtually unknown and it thus became relatively easy to maintain the speed of the advance.

To sum up: the most highly mechanized army is not always the most mobile, except under very exceptional conditions of terrain, e.g., North Africa. The degree of mobility which can be attained by a largely non-mechanized force can be considerable, while a highly mechanized force is always in danger of hampering its own mobility by a form of self-imposed paralysis. This paralysis can, however, be to a great extent avoided provided that ruthless steps are taken to cut down the number of vehicles using the roads in the forward areas. Furthermore, this object should be achieved without detriment to the efficiency of operational units by concentrating ruthlessly on administrative services and units not directly engaged in current operations. If the problems as well as the advantages of increased mechanization are taken fully into account and adequate steps taken to circumvent them, a disciplined and mechanized force even in difficult country can achieve something of the standard of mobility envisaged by the purely theoretical military thinker. But staff and regimental officers alike must remember how narrow is the dividing line which separates ordered mobility from chaos and confusion; the former can only be achieved as a result of rigid discipline and the determined co-operation of all ranks.

## DISPLACED PERSONS IN AUSTRIA

By LIEUT.-COLONEL R. M. HALL, The South Staffordshire Regiment

**D**ISPLACED persons in Germany have recently<sup>1</sup> been the subject of a comprehensive survey in the *Times*, whose article of 21st July last gave a clear idea of the enormous numbers of homeless strangers that had been found inside the Reich, and the measures taken to house and feed them and to move them homewards. In Austria, the Eighth Army has had a similar problem to deal with, but the circumstances have differed greatly and the practical action, in which were combined previous experience in Italy, foreseen planning and immediate necessities, has possibly been quite dissimilar from that just over the border, and indeed differing in the various zones of Austria.

One thing stands out clearly from the Allied experiences in both countries: that is the immense value of the forethought and detailed planning that had been devoted to the subject of Displaced Persons and Refugees during the year of preparation. Not that the planners have always been right. In Austria, their estimate of numbers was nearly three times too high, and one is tempted to smile at their pious hope that when the "Cease Fire" should sound, the myriads of homeless would obey a clarion call from Military Government to "Stay put"! "Stay put as you are till we can sort you out, register you, and send you comfortably home to nice Reception Camps, from which you will go straight to your old towns and jobs."

However, the very existence of a Plan with prepared instructions, forms and booklets, and above all of a nucleus trained staff, has ensured a large measure of common practical action and reduced delays to a minimum. The main lines of the Plan have proved sound; they defined the tasks and policies towards various classes of homeless folk and gave the staff a framework on which to build. Now that the conditions are settling down, adjustments are being made in the attitude towards different nationalities, e.g., the difference between the "friendly" and the "enemy" is beginning to disappear; on the other hand, the initial instructions for their care and welfare are working out admirably as a policy.

To "stay put" was the last thing anyone intended to do when the war ceased with startling suddenness on the Italian front, but the physical difficulties were enormous. Before the victorious Eighth and Fifth Armies lay a wide belt of broken communications, from the Po deep into the Alpine ranges that separate Austria from Italy, an area teeming with surrendering Germans. How well the Air Force had done its work is still obvious to-day, when only a few trains crawl over lofty Bailey bridges spanning mountain gorges, over deviations laid across the stony wastes that represent river beds until Winter turns them into wide torrents, and over pontoons on the Po. The advance of our leading troops up the one main pass from Udine to Villach was further impeded by the demolition of vital remaining bridges by parties of Germans who for some reason had not been under Kesselring's command and so considered themselves exempt from the "Cease Fire." As a result, little more than the area of Carinthia had been occupied when our advanced guards met the Russians and the Americans and the line of that junction remained the

<sup>1</sup> This article was written in August 1945.

administrative frontier until the zones were adjusted by political agreement at the end of July.

Carinthia was an old province of Austria, later a Gau of Germany. In size it compares with Yorkshire, but whereas that broad county combines big cities with much moorland, Carinthia is mostly sheer mountain, and of its limited valley space much is covered with lakes. Magnificent the scenery may be, but only the valleys can support the people, mainly farmers and woodmen.

As our troops reached Carinthia, about a week after the surrender, their eyes met strange sights. Over the northern passes scrambled a mass of the German Army, fleeing before the Russian advance, toppling their vehicles over the hillsides in their haste, mixed with long columns of civilian refugees filled with the same idea. Inside Carinthia were bivouacked a Hungarian Corps and a Cossack Corps, both of the German Army, surrounded by twenty or thirty thousand horses, grazing bare even this green countryside. Over the southern passes from Yugoslavia had already poured invading columns of Marshal Tito's forces, bent on adding possession to their otherwise weak racial claim on Carinthia, and with them, by hill tracks, had poured a crowd of Yugoslav civilian refugees from their new regime. Yugoslavs seemed everywhere; their troops, armed to the teeth, noisily demonstrated in the towns and attempted to establish a system of military government; their refugees squatted by thousands in a contrasting orderliness, making for themselves bivouac shelters of branches or any scrap, and quickly appointing their local committees and leaders. In the excitement of the time, these unforeseen refugees from Yugoslavia were reported at anything over 50,000, were expected to reach 130,000, but have in fact since taken shape between 10,000 and 15,000. On the southern frontier stood the Italians, tens and tens of thousands, lined up for the race back into Italy. During May nearly 100,000 of them got home.

The Plan by which the Eighth Army were to deal with Displaced Persons had been worked out for the projected British Zone of Austria. Each Army of Occupation had its own plan and methods, though naturally the British plan had been closely co-ordinated with the American Zone of Austria and with S.H.A.E.F., even to using the same registration forms.

A Displaced Person (D.P.) was defined as a civilian who had, through the war, become homeless outside his own country, *e.g.*, an impressed worker from France, whilst a Refugee was one displaced but within his own country, *e.g.*, the bombed out from Vienna. D.Ps. were sharply divided into Allied or Enemy, to be treated on quite different lines. Military Government (Mil. Govt.) was to take care of Allied D.Ps. but enemy D.Ps. were to be the responsibility of the Austrian authorities, though Mil. Govt. acknowledged its obligation to supervise the latter. Prisoners of War (P.W.) were quite different; they were soldiers, to be rounded up by Army units and disposed of by the Army staff; but this apparently simple principle soon produced a crop of problems quite other than directing a German Corps Commander where to assemble his men, their transport and their weapons. There were released Allied P.Ws., such as French and Italians of doubtful status; there were Yugoslavs of varying shades—Royalist or anti-Royalist, pro-Tito or anti-Tito, but all considering that they had a claim upon our sympathy and support; Hungarian troops, though definitely enemy, were found to have with them so many families, carts and even cattle, that the Army units were aghast at taking such nomadic gypsies into their P.W. camps. Since then, the political situation of the Hungarians has deteriorated and they remain bivouacked in the Austrian mountains, with every possibility of becoming D.Ps. as Winter draws on.

The Plan estimated that the British Zone of Austria might contain half a million D.Ps., mostly foreign workers, and appreciated that later there would be a big transit movement of home-going people in all directions across Austria. To deal with these, an organization was evolved, as follows:—

D.P. Section of the Mil. Govt. Staff at Headquarters, Eighth Army.

D.P. Staff officers for the Senior Mil. Govt. officers of Carinthia and Styria.

D.P. teams to run camps to collect, sort, despatch, or hold.

D.P. Reconnaissance Teams.

A considerable reinforcement of British Red Cross and Friends Ambulance Unit Workers.

Once collected, the D.Ps. were to be "processed," that is they were to be registered (showing occupational classes), checked against lists of war criminals or suspect classes, such as "S.S.", fed and disinfected, then sorted out for housing and eventual repatriation. D.P. teams were to have as many officers as possible who had experience of similar relief work in Greece, the Balkans and Italy.

Farther South, in Italy, a Refugee Organization had been for a year or more dealing with the homeless of many nations, and Rome had arranged to extend their camps to the North of Italy. One particular staging camp, to which reference will be made again, was located at Udine, where all the then possible routes from Austria and from the disturbed Trieste area converged.

Such was the carefully prepared Plan. Kesselring's swift collapse was followed by the confusion already described in Austria, towards which the British Army was struggling through the one battered pass from Udine to Villach: troops, tanks, bridges, supplies by the thousand tons for all purposes. Mil. Govt. strove to deploy its D.P. teams with the Army, but it was obvious that even if they could have been sufficiently numerous, they could not have got through the bottleneck nor have been given sufficient transport to arrive everywhere they were needed. So it was the Army units which initially took control of the D.Ps. as well as the Prisoners of War. Each unit of the V Corps, as it went into its allotted billeting area, found itself faced with both thousands of prisoners and hundreds of D.Ps., men, women and children. Occasionally both had perforce to be herded together temporarily, but usually units were able to find some suitable building or a German labour camp into which the D.Ps. could be put. British officers quickly accustomed themselves to their new responsibilities. As D.P. teams arrived on the scene, they took over the larger camps, and during the next two months both Army and Mil. Govt. Staff had as many D.P. camps on their hands as they could manage. Gradually all have been absorbed into about twenty of the better Mil. Govt. camps.

It can be imagined how difficult it was to form any reliable estimate of numbers, with the crowds of Italians, Yugoslavs and Hungarian families alongside the roads, and the less visible spread of workers over the farms and small factories—Poles, French, Dutch. Every now and then appeared odd bodies of Russian refugees, of Rumanians trekking the longest route back to their country, and eventually the list included nearly fifty nationalities. However, it was agreed that the gross total was under a quarter of a million, and some main factors became apparent: that D.Ps. of certain countries could not immediately be sent back there without great danger; that no route was open for north-bound movement; and that as many persons as possible should be cleared out quickly, both to ease the food question and to clear the area in which the Army was then taking precautions against a tense political situation.

It was then that the Commander of the Eighth Army Supplies and Transport rendered most effective support. He ordered no lorry to leave Austria empty without first enquiring if there were D.Ps. to be evacuated. At that time Army convoys were continuous up and down the Udine-Villach road and they lifted anything up to 10,000 people in a day. Udine was the forward base, so D.Ps. were dropped at the staging camp there. This remarkable unit, improvised for the purpose, consisted of a South African subaltern (to whom a second officer was lent), two Italian liaison officers, two Italian Red Cross girls, half a dozen Italian women volunteers from the town, and a few Carabinieri. This tiny mixed team coped throughout the month of May with several thousand arrivals and departures a day, the peak being 10,000. The laden lorries from Austria were met, the D.Ps. sorted and guided to quarters by nationalities; a hot meal was provided—usually macaroni and stew—and the sick and most needy tended. Then up rolled more lorries going to fetch stores from bases farther South in Italy, and into these the D.Ps., now roughly sorted by destination areas, were embarked for the next stage of their homeward journey.

The tempo of their journey did not, however, continue at this pace. The southern links of road transport began to be replaced by shipping to Venice, and few of the ships were of a kind that could take passengers in bulk. And the camps in Italy were filling rapidly, largely with people such as Poles for whom there was no outlet, whilst shipping to the Balkans came to an end. So at the end of May, the movement of D.Ps. from Austria to Italy had to be halted, and the floodtide of evacuation was over. The tide had carried with it nearly 100,000 persons, and fortunately had drained nearly all the Italians out of Austria, leaving but a few hundreds.

The residue in camps was then about 30,000, including 10,000 Yugoslavs and 6,000 Poles, besides the many still working on the land. Of the "Enemy" D.Ps., German, Austrian and Hungarian refugees, some were in work, others collected in odd houses in the villages, others in P.W. camps and bivouacs. As already mentioned, the Austrians were responsible for them.

It is one of the blessings of 1945, second only to the ending of the war itself, that the end came in the Spring. That the millions of prisoners and D.Ps. were able to camp for months in woods and bivouacs, that attention could be given to saving and reaping the harvest, that the few roads could take the enormous weight of traffic without becoming mud tracks, and above all that there were five or six months in which to plan accommodation and build up food stocks before Winter should close the mountain passes, are reasons for thankfulness in Europe.

June had thus brought a local pause in evacuation from Austria which afforded the first real opportunity to take stock, to make a reliable count of heads in camps and estimate of D.Ps. still outside, to arrange camps by nationalities and to build better camps for the Winter. On the larger issue, a conference was held at Bolzano between the American and British Zones of Germany and of Austria where a programme was drawn up for exchange movements of P.W. and D.P. Movement was to start on 1st July, when railway repairs would be sufficiently advanced. To give some idea of the volume, there were over 300,000 Italians to be railed through the Brenner, whilst daily since then two or three heavily-loaded trains have rolled through the Tauern tunnel and across Austria, taking Yugoslav workers home from Germany. Such numbers take time; and in August the British Zone in Austria still awaited the homecoming of at least 50,000 of its displaced citizens and thrice as many soldiers.

During July it became easier to conclude arrangements between zones of occupation. The remaining French, Belgian and other Western Europeans got their chance of making home and all but a few took it eagerly. Very large numbers of Russians were ferried homewards across Austria from collecting points in Italy in long columns of lorries provided by the American Fifth Army, and into this human stream were injected the smaller numbers of Russians, soldiers and civil, that remained in Austria. Most Czechs were similarly worked homewards, and a few Poles, though the majority preferred to wait in hopes either of more settled times in their own country or of finding a "Promised Land" somewhere in the West. Thus the D.Ps. in British Austria were reduced to rather less than 20,000, of whom nearly all beg to be allowed to stay, for the time being at least.

On this basis of semi-permanent population, the camps have been reorganized. The last remaining D.P. bivouac has been burnt. The British camp commanders now have their regular tenants, often only one nationality in a camp or several communities that settle down well together, and all are busy on welfare and occupation for the people of all ages. Such important subjects have not been overlooked hitherto; far from it, but it has been uphill work. For instance, one camp had a splendid Greek Orthodox church established in a large hut, served by twenty or thirty priests, when overnight a reshuffle became inevitable, and the building had to become a dormitory for other races. So with the camp schools and the efforts to start handicraft training classes. Now these interruptions are past, at least for a time, and a visitor will find community life taking shape happily in all camps, though still handicapped by a shortage of workrooms, tools and raw materials. Much has been done to get outside employment for the men, and for some women, and numbers of the more reliable and skilful are billeted out as farm hands or plumber's mates, etc., whilst others go out in daily working parties.

The British teams that look after camps of two or three thousand D.Ps. consist of one or two officers, two sergeants, two soldiers and several ladies of the British Red Cross, with perhaps a man of the Friends' Ambulance Unit. Very quickly the Commandant organizes a system of self-government: Camp Leader and hut leaders are appointed, and possibly committees for communal activities such as child welfare; a camp staff of cooks, carpenters, plumbers and sanitary men is formed, and the office is set up. This last is the most difficult, as surprisingly few have been found among the D.Ps. capable of making good clerks.

One British sergeant takes charge of the rations and general stores. This is a job to test his adaptability, because the source of supply for all food, camp fittings and requirements, such as "brooms, common, soldiers, one" is not the Quartermaster nor yet the Army Ordnance, but the local Burgomaster, with whom indent and invoice are in German, in German quantities, and of unfamiliar foodstuffs. Provision of these is an Austrian responsibility, against local funds, according to a ration scale fixed by Military Government in full knowledge of the country's resources. From time to time it has been necessary at some camps to supplement local produce from Army rations, but usually the Burgomaster can be prevailed upon to produce his quota. The scale, however, is barely sufficient, and much thought is being given how to bolster up the ration and also accumulate reserves of food and fuel against the deep Winter snows.

Most camps are equipped with excellent steam cooking boilers and baths left in good order by the Germans. Camp hospitals are run, some by British Army medical officers and Red Cross ladies, some by German or Austrian doctors and sisters. In

some camps the Red Cross have made most excellent crèches, chiefly for tiny orphans. The Friends' Ambulance Unit have a special charge in the care of some two thousand German children, both boys and girls, that were left behind in Hitler Jugend and similar schools, and whom it is not likely to be possible to send home for a long time, if indeed their families can be found again. Their re-education is indeed a problem. It is estimated that besides these organized groups there are several thousand more ownerless children, and it will be necessary in due course to set up an exchange and reception scheme for children.

August has brought boundary changes, chiefly the British taking over Styria from the Russians. The latter seem to have taken with them all eastern Europeans, which has much reduced the D.P. problem there. For those that are left, camps are being set up on the same lines as in Carinthia by staffs who gained practical experience there whilst waiting for Styria.

Winter plans are now being made, and a large scale Conference is being held in London to determine when U.N.R.R.A. can begin to take over camps in Austria.<sup>2</sup> This means a big change, for whereas the work has so far been done by mobile Army teams, ably assisted by equally flexible Red Cross and F.A.U., ready to tackle any problem whether affecting friendly or enemy refugees, the U.N.R.R.A. teams when they come will take over completely, starting with the more static camps, and their charter does not extend to enemy D.Ps. On the other hand, it is felt that when Winter comes at the end of October the problem is likely to become much more serious in that thousands of persons now working or camped on the land will be driven to ask admission to D.P. Camps by the ending of their work and the general food shortage which is admitted to be inevitable this Winter. By that time, distinctions of friend, enemy or prisoner will have largely disappeared; it will be one big human problem, made more acute by large numbers of children. So it is devoutly to be hoped that political agreements will enable more D.Ps. to be repatriated soon.

The home-coming of repatriated persons is no easy matter. The Army and Mil. Govt. may get agreements made, can find the trains and provide Staging Camps, but they can do nothing further when the ex-D.P. is faced by his old home either a war-ruin or an Army billet. This is another case for the local Burgomaster and another Winter problem.

To sum up, at this moment, August 1945, there are two main aspects of D.P. work: first, the immediate care and welfare of those we have in hand and, secondly, the long-term solution of their disposal. In Welfare there is always something more that can be done. The staffs who have been looking after these persons for three months have grown more and more keen on the job; most of them are due to wait some time for demobilization, and they are only too happy to have this useful work in the meantime; one hears them say "this is the best round-off I could have for my Army career." The gradual introduction of U.N.R.R.A. teams may balance the rate of Army discharges. As regards equipment for welfare work, such as apprentice tools, it should be possible to get more from the Austrian administration as the Allied Commission takes control.

Welfare, however, is not much more than a palliative. Repatriation or resettlement are the only real solutions, however difficult. D.Ps. are a cross-section of humanity. Mention has been made of some types, such as the political exile, the

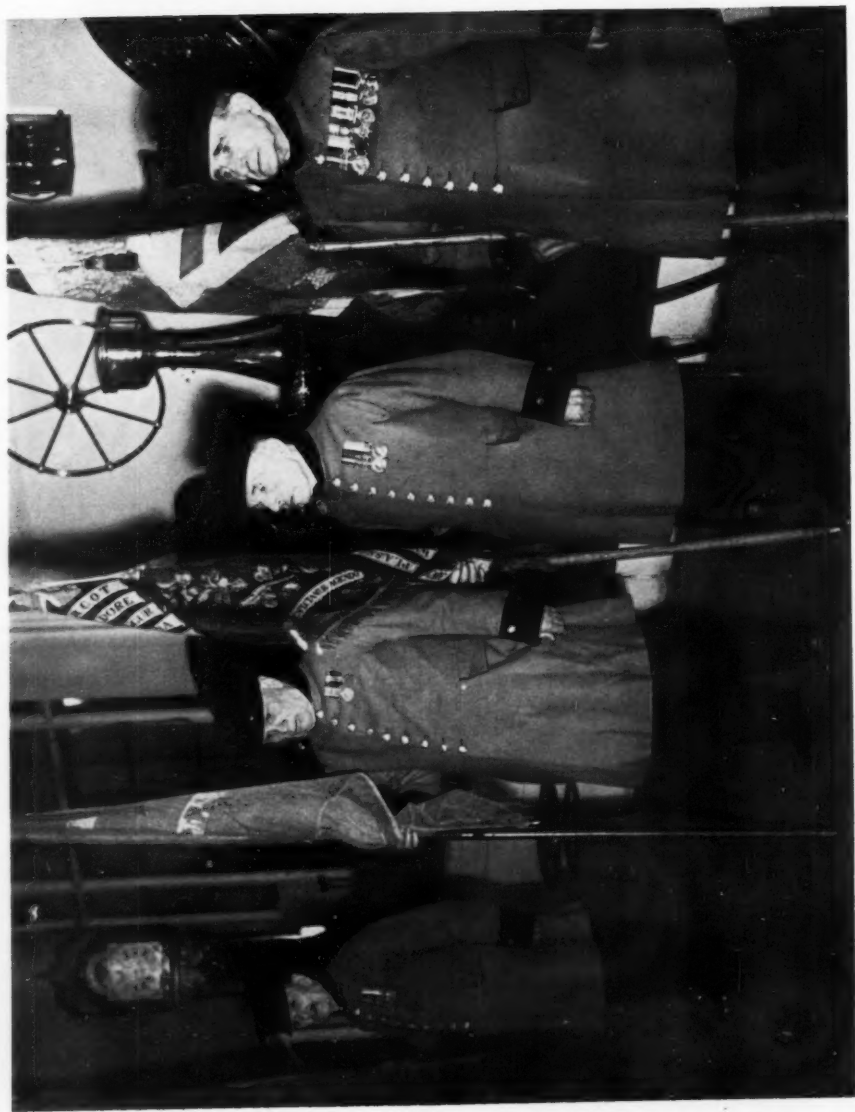
<sup>2</sup> U.N.R.R.A. have now taken over some of the camps in Austria, and their staffs are working with those of Military Government.

collaborationist shy of his own country, the orphan who does not even know his own race, the Stateless whose frontiers have been redrawn. Others are an economic problem: a few highly-skilled or educated men who should be of the greatest value if they could be placed in work; others with business interests in countries such as America or Britain, to which there is yet no means of consular approach; and the usual proportion of loafers for whom life as a sheltered D.P. is all they could desire. Steps are in fact being taken to discover how these special cases could be brought nearer to employment, and how the undesirable can be ejected.

There are again two sides to the question of continuing to hold D.Ps. in Austria: one is their rehabilitation, which is hardly likely to make great progress in even the best conditions of Welfare, unless they can see the time growing nearer when they can re-settle somewhere and become normal citizens; the other is the obligation of Austria to house and feed them. At present that is quite clear, but there will come a time when the economic burden must be very closely examined, when mere contentedness will no longer be an adequate reason for being kept, and when political objections, by either the D.Ps. or his country, will have to be sifted as part of the international re-settlement.

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OLD COLOURS OF THE ROYAL DUBLIN FUSILIERS

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## OLD COLOURS OF THE ROYAL DUBLIN FUSILIERS

### HANDING OVER CEREMONY

**A** CEREMONY took place in the Institution's theatre on the afternoon of 25th October, 1945, at which General Sir Alexander J. Godley, G.C.B., K.C.M.G., in the presence of a number of former officers and other ranks, handed to the Chairman of the Council—Air Chief Marshal Sir Robert Brooke-Popham, G.C.V.O., K.C.B., C.M.G., D.S.O., A.F.C., two stands of old Colours of the 1st and 2nd Battalions of the Royal Dublin Fusiliers.

General Godley said that the Colours of the 1st Battalion were those carried by the 102nd Regiment of Foot, the Royal Madras Fusiliers—well known as "Neill's Blue Caps," from 1866 to 1881, and by the 1st Battalion, The Royal Dublin Fusiliers, from 1881 to 1907, the Royal Madras Fusiliers having been designated 1st Battalion Royal Dublin Fusiliers in 1881. They were presented at Cannanore, India, on the 26th January, 1866, by Mrs. de Saumarez, the wife of the Brigadier-General Commanding the district, and were carried until April 5th, 1907, when new Colours were presented to the Battalion by Field-Marshal H.R.H. The Duke of Connaught, Colonel-in-Chief of the Regiment, at Alexandria, Egypt. Subsequently these old Colours were presented to H.R.H. by Lieutenant-Colonel Chapman, then commanding the 1st Battalion.

In the case of the old Colours of the 2nd Battalion, they were presented to the 103rd Regiment of Foot, The Royal Bombay Fusiliers—well known as "The Old Toughs"—by H.R.H. Prince Arthur, at Parkhurst, Isle of Wight, on the 19th August, 1871, and were carried by that Regiment until 1881 when it was renamed the 2nd Battalion, The Royal Dublin Fusiliers. They were carried by that Battalion until the 1st July, 1911, when the Battalion was presented with new Colours at Aldershot by Field-Marshal H.R.H. The Duke of Connaught (formerly Prince Arthur), Colonel-in-Chief of the Regiment. Subsequently these old Colours were returned by Lieutenant-Colonel Bromilow, commanding the Battalion, to His Royal Highness, he having presented them in 1871, and were displayed alongside those of the 1st Battalion in the Duke's Museum at Bagshot Park, until his death in 1942.

The Chairman in accepting the Colours said: "It is particularly appropriate that the Colours should pass to the Institution from Bagshot Park, because your late Colonel-in-Chief, H.R.H. The Duke of Connaught, was—as you will remember—also our late President.

We already have in safe custody the Silver Plate and trophies of both the 1st and 2nd Battalions, most of which have still to be brought back from the place of safety to which they were sent during the War. You will see here, however, a few associations with the Regiment which may recall to you the days of your old comradeship and achievements. Behind us are the steering wheels and steaming lights of the "River Clyde," which will bring back to members of the 1st Battalion memories of "V" beach, Gallipoli. Here, too, are some sporting trophies of the 2nd Battalion to recall athletic contests in days gone by.

This Royal Institution is, as you know, the very temple of Service traditions and it is our privilege to house and preserve emblems of the traditions of famous regiments like the Dublin Fusiliers which no longer have a resting place for them. In depositing your Colours here, therefore, you may feel assured that they are in safe keeping and that they will be venerated as you would wish."

Four Pensioners of the Royal Hospital, Chelsea—all old Dublin Fusiliers—then bore the Colours to the Banqueting Hall where they were hung in place by the Museum Attendants.

NOTE.—These Colours are not those which the Royal Dublin Fusiliers in company with other disbanded Irish regiments handed over to H.M. King George V and which were laid up at Windsor Castle, but earlier Colours which had been replaced by that date.

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## GURKHAS

By MAJOR H. R. K. GIBBS, M.C., 6th Gurkha Rifles

**E**VERYONE knows that the Gurkha is a fighting man second to none and that he is a hillman, but from the many queries I have had to answer from time to time it appears that many Service people would like to know a little more of his characteristics and background.

The vast majority of our Gurkha soldiers come from Nepal, but not every subject of that Himalayan kingdom is a Gurkha, nor do all Gurkhas live in Nepal. Reduced to a simple generalization, it is fairly accurate to say that a Gurkha is a man of the various clans and tribes in Nepal or originating in Nepal who have a hereditary right to the bearing of arms and who naturally take to the Army as a normal calling. Pressure of an ever-increasing population in a small mountainous country has led to a steady emigration during the past 150 years into India, Sikkim and Bhutan. This stream of emigrants has flowed mainly in an easterly direction and is seen chiefly in the British districts of Darjeeling, Assam and Northern Burma as well as in the above-mentioned States of Sikkim and Bhutan. There is also a considerable Nepalese population in Calcutta and in the British-Indian districts close to the Nepalese border. These Nepalese however, are not usually enlisted as fighting men, as they lack the finer points that one looks for in a Gurkha soldier. Gurkhas from Darjeeling and Sikkim are, of course, excellent men and they have a fine record in the latest war as in previous wars.

To the ordinary Gurkha soldier Nepal means the Valley of Nepal, a comparatively small area surrounding the capital, Kathmandu. He will say that he comes "from the hills"; he will also state that he is a Magar, a Gurung, a Chhettri, a Limbu or a Rai, etc., according to his tribe or clan. The word Gurkha or Gurkhali is of fairly modern origin and it was first applied to the followers of Prithwi Narain, who hailed from the little principality of Gorkha, overran Nepal in 1768 and became the first rulers of a more or less unified kingdom. Prior to Prithwi's conquest the whole country was split up into innumerable petty States under Rajas who were usually at war among themselves.

As has been mentioned above, not every Nepalese subject is a Gurkha. There are many menial and artisan classes spread throughout the country who do not enjoy that title for all that they are Nepalese. Such men are only enlisted for their particular trades. In a special category come the Newars who form the bulk of the population of the Valley of Nepal. The Newars are probably the aboriginals and at one time they ruled the Valley. In appearance they are Mongoloid, though in a lesser degree than the remainder. They have their own rather complicated divisions of caste, but they have provided many first-class soldiers in the past as they do to-day. For the most part, however, they are craftsmen and the cultivators of the Valley, although a large number are spread about the country as a whole and are the chief merchants and shopkeepers. The glorious architecture and skilful craftsmanship in wood and metal-work that the visitor sees in Kathmandu and the ancient cities of Patan and Bhatgaon are the heritage of the Newars. Their power was broken by Prithwi Narain and their aristocracy almost obliterated, but to-day many of them hold important posts in the government of the country.

Modern Nepal dates from 1846, when Jang Bahadur seized power and laid the foundations of the great Rana family who rule to-day. It was also in his period that

the present extremely friendly relations between Great Britain and Nepal were firmly established. Nepal is an independent sovereign kingdom. The King takes no active part in the Government, and all the real power is in the hands of His Highness the Maharaja—Prime Minister and Supreme Marshal of Nepal. All decrees are in the name of the King and are given under his seal. He is spoken of as the "Panch Sirkar" or Five Governments, while the Maharaja is referred to as the "Tin Sirkar" or Three Governments. They have the word Sri prefixed five and three times respectively to their names. The position of the King is that he personifies the sovereign independence of Nepal and is the fount of honour, being the sovereign of all Nepalese orders of chivalry. Almost all the members of the ruling family and important officials live in Kathmandu and, in effect, the chief offices of State are held by men of the Rana family.

Nepal is represented in London by the Nepalese Minister at the Court of St. James and in New Delhi by a Consul-General. There is also at present a Commanding General in charge of all affairs connected with the Nepalese troops serving with the Army of India. The office of Prime Minister is hereditary and descends to the Maharaja's sons or brothers or their sons according to age. Hence the eldest son of the Maharaja does not necessarily succeed his father directly. The crown descends to the King's eldest son or, failing sons, to his eldest daughter.

Nepal is a Hindu country, the only independent Hindu State in the world, and the Brahminical laws permeate every aspect of the country's life. The majority of our Gurkha soldiers are not particularly punctilious in their observances of caste rules, as most of them do not wear the sacred thread of caste Hindus. They are, however, bound by the more important rules regarding food and marriage, etc. All caste rules are put aside in case of real necessity, as on active service, and on return from service overseas all Gurkhas perform the ceremony known as *Pani Patya* before specially delegated Nepalese priests nominated by the Raj Guru, the chief priest of Nepal. This frees them from the consequences of any involuntary infractions of caste that may have occurred. The Chhettris are somewhat more inclined to religious observances than other Gurkhas and they wear the sacred thread. In the social world they enjoy considerable prestige, although Thakurs are of higher birth; the King of Nepal is himself a Thakur. The Thakurs are not numerous, but they are greatly desired as soldiers. The great bulk of our Gurkha soldiers come from the Magar and Gurung clans of the West and from the Limbu and Rai clans of the East. A certain amount of debased Buddhism remains below the veneer of Hinduism; this is the more marked in the eastern tribes.

Gurkhas are very superstitious and readily attribute many of the minor misfortunes of daily life to ghosts and unfriendly spirits. The chief characteristic, however, which is so obvious to all who have served with or alongside Gurkhas is his unflinching cheerfulness. He has a great sense of humour and of fun. His songs, jokes and proverbs have the tang of wit, and this sees him through the inevitable discomforts of active service. The true hill lad is unsophisticated and clean-minded with a refreshing frankness that endears him to his officers. As a family man he is very generous, and his women folk enjoy a liberty and freedom from petty restrictions probably unequalled in the East. Gurkha women take a very prominent share in the daily life of the country and, when it is a case of "Johnny get your gun," his wife runs the home farm very capably. That she too can prove her worth to the forces is shown by the very ready response when a Gurkha W.A.C.I. company was formed for the Signals.

All Gurkhas are pastoral or agricultural, and the soldier's ideal on retirement from the Army is to return to his small holding on the mountain side. Sport plays a big part in his life and everyone aspires to the possession of a gun of some sort, usually a muzzle-loading twelve-bore. Deer, mountain goats and wild fowl are all eagerly sought after, but above all wild pig and porcupines are prized. Fish has an overwhelming attraction for a Gurkha and he will go many miles to get it. His methods of catching fish will probably not appeal to your dry-fly purist, but he likes a quiet day with a primitive rod and line. Bombs, mosquito nets and even shirts are pressed into service when all else fails. Preserved waters require careful watching if any Gurkhas are in the neighbourhood !

As is common among all hill people, festivals are important events in the Gurkha's life. Though they have religious sanction, these feasts are largely concerned with the changing seasons and their effects on his home life as a farmer. The joy of Spring and promise of fertility is expressed in the Holi festival which comes in late February or in early March, and the Harvest Home celebrations follow in the Autumn. This latter festival of the Dashera is the greatest of all Gurkha feasts and, as befits his martial character, it is a time when he glorifies his profession as a soldier. Rifles, guns, swords and kukries are displayed at the place of sacrifice, and innumerable goats and many buffaloes are beheaded with the kukri. The Gurkha's skill with the kukri is proverbial despite the many apocryphal stories that are told about it. Contrary to common belief, a kukri is not thrown but is used with a downward chopping stroke. It is a useful all-round implement and performs many household tasks, while as a close-quarters weapon it is unsurpassed when wielded by a Gurkha.

Johnny Gurkha is no plaster saint and, like any other man, he has his faults. Gambling and a marked spend-thrift attitude to money are perhaps his besetting sins. His liking for strong drink can sometimes lead him into trouble, and when he fancies himself as a ladies' man he can drive a coach and four through all the Commandments. He responds to good leadership and strict discipline provided he is convinced that he is getting a square deal. One cannot overwork him, but he will not stand for nagging, which only causes him to become sullen and wooden. He has always had a natural liking for the British soldier and he gives all that is in him to his British officer once they have established their relationship on the basis of mutual respect. As a soldier in our service, the records of the last 130 years speak for themselves, and in the present world war his previous fine record has been amply upheld. The twelve Victoria Crosses won by the Gurkha Brigade up to date—ten of them by Gurkha ranks—form an eloquent testimony to his gallantry.

In conclusion, one may quote the story told by General Slim, himself a Gurkha Brigade officer. Not long ago the General was visiting a hospital full of wounded men from the Burma front. He was told that a young Gurkha rifleman had made an earnest request to speak to him. The lad, who had been badly wounded in the chest and lung, said to the General : " The doctor tells me that I have got to go on three months' sick leave, but I want to go back to my battalion. When the Japanese wounded me I lost a lot of blood and I've just got to make a lot of Japs lose a lot of blood to even things up. You can fix it up, can't you ? " The General remarked that he too had been wounded in the chest and lungs in the last Great War and although he lost a lot of blood he had come through it and " look at me now ! " he ended. The boy grasped the General's arm and burst out, " Well ! there it is, we

are both the same. Now you tell the doctor that I am to go back to the battalion." Thus it was arranged, and a note from the General to the boy's Commanding Officer explained matters and ensured that he would be let down lightly. As General Slim remarked: "So long as we get men with that spirit the Japs will never have a chance." The old Gurkha adage sums it up thus: "It is better to die than to be a coward."

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## INTERNATIONAL SITUATION

### THE ATOMIC BOMB AND POLICING THE WORLD

In a speech on foreign affairs, made in Parliament on 7th November, the Foreign Secretary—Mr. Ernest Bevin, gave a timely warning against ill-informed argument that the invention of the atomic bomb had rendered the fighting Services in their present form obsolete. He said :—

“ It has been argued by many people that the coming of the atomic bomb would wipe out the need of armies, navies, or air forces. I think that is quite a misconception. What are the duties, apart from fighting, of armies, navies, and air forces ? If you take a hundred years, I suppose it would be fair to say that for 85 to 90 per cent. of that time their duties have been police duties. In this world you must keep law and order ; you cannot carry on civilization in any other way.

“ I do not suppose that it is in the mind of any hon. member that every time somebody becomes obstreperous you should fetch out the atomic bomb, with disastrous results. I think it is much better to drop a leaflet which, probably, in an ordinary disturbance has just as good or probably a better, result.

#### RISKS OF A SMALL NAVY

“ What astounds me about the history of the British Navy is how cheaply we have policed the world for three hundred years. I often think, when I read this history, that it is a good job no one called our bluff very often, for really, looking back over the discussions in this House on budgets and estimates, you did take some frightful risks at times.

“ I think the world was policed largely by the British Navy with less than 100,000 men. That is a very cheap police force, if you consider the size of the whole world.

“ Therefore, I do not want us to get either in a panic about the atomic bomb or for it to be regarded as a substitute for the ordinary normal means of policing the world under ordinary and normal conditions. Neither would I like to see the fact that you have to keep police forces, or military forces, regarded as being a weapon of offence. It is a question of balance, and a question of what is right to keep order.

“ I hope that as the United Nations Organization grows we shall succeed in cutting down military expenditure to a minimum, but not to such a point that will make the United Nations Organization ineffective in itself to stop aggression. Therefore, the Government of the day, as time goes on, will have to balance that very very carefully. His Majesty's Government, at the moment, has very very wide obligations all over the world. There is the aftermath of the War which is very costly and very difficult, but we are not taking any risks until we are quite out of the wood.”

### RUSSIA AND THE BRITISH EMPIRE

In the speech referred to above, Mr. Bevin also said :—

“ If I may refer to Russia . . . we have met almost every demand that we ever thought we should be asked for. At Moscow, at Yalta, at all those conferences, no one dreamed that there would be further territorial demands, except here or there, and the Straits adjustment which you have already made—warm water ports, everything has been conceded.

“ I must say that, having conceded all this, and not taken one inch of territory, or asked for it, one cannot help being a little bit suspicious if a great Power wants to come right across, shall I say, the throat of the British Commonwealth, which has done no harm to anybody but fought this war.

"One is driven to ask oneself what is the motive. That is not unreasonable. I think that we must get down to stopping this demand for transfer of territory, and, within reason, make adjustments here and there. All this chopping and changing of frontiers during hundreds of years have made people very little richer or more secure.

"Do remember this—I make this plain because sometimes we are lectured about it—in the British Empire we gave freedom where it did not exist before, by the development of the Commonwealth. No one can read the policy of his Majesty's Government within the few months that have followed this war without seeing the desperate efforts we are making to extend that liberty and commonwealth idea still further. It is time we sang our own song a little bit."

## CORRESPONDENCE

(Correspondence is invited on subjects which have been dealt with in the Journal, or which are of general interest to the Services. Correspondents are requested to put their views as concisely as possible, but publication of letters will be dependent on the space available in each number of the Journal.—EDITOR)

### JUNGLE WARFARE

To the Editor of the R.U.S.I. Journal.

SIR—In the August number of the Journal there is an article written by Major A. S. Irwin, M.C., making a number of criticisms of a lecture that I gave to the R.U.S.I. which appeared in your May number. In spite of the fact that the war with the Japanese has been brought to an extremely successful conclusion, I feel that I should answer these criticisms as it is important to get facts accurate.

1. He says that I am off the mark when I doubt the presence of the jungle. I cannot trace having given this impression, I merely endeavoured to give to a mixed audience a picture of what the jungle is like in its various forms, and they are many. No one who has fought in Burma is likely to doubt the presence of the jungle.
2. Major Irwin is incorrect in stating that the 36th Division came into the Arakan at the beginning of 1943 to relieve the 7th Indian Division which was, as we all know, relieving itself extremely successfully. The 36th Division was brought into the Arakan at that time with the object of attacking Akyab, but operations did not go quite according to plan, and therefore it was used firstly as a reserve division in the IV Indian Corps, and then to relieve the 5th Indian Division on the West side of the Mayu Range when that division was flown up to Imphal. Later it was put under command of General Stilwell in North Burma.
3. As regards tick typhus I stated that in its early days about 80 per cent. of the casualties were fatal and not 100 per cent. as Major Irwin states. This was also the early experience in the South-West Pacific.
4. I was not being contradictory in saying that although mules can go where men can, yet it was often impossible to get guns up—with particular reference to the 3.7-in. howitzer. No mule-borne 3.7-in. howitzer could deal adequately with the Japanese bunker, and it was often impossible to get up guns of calibre adequate to do so.
5. My remarks on the bunker and foxhole are also questioned. I still maintain that it is impossible to state specifically what a Japanese bunker is, except that it is normally some kind of covered-in strongpoint. As regards the foxhole, Major Irwin should know that the powers that be decreed early in 1944 that the word "foxhole" was to be deprecated, and "weapon pit" or "slit trench" should be used in its stead.
6. I am at a loss to understand Major Irwin's remarks about my having fallen into the trap of debunking mepacrine. If he will read my lecture carefully he will note that I say that—"mepacrine is a suppressive drug taking the place of quinine, and it has been found *very effective indeed*. *It does no one harm*, and the only effect it has is to make people go rather yellow,"—and it is well known that this is a fact and not fiction. An official pamphlet on anti-malaria precautions states: "Don't be surprised if your skin becomes slightly yellow"—after taking mepacrine. I agree with Major Irwin that it was some misguided idiot who started the rumour that mepacrine was likely to make one impotent.
7. As regards the efficiency of Japanese artillery, I do not know the views of all the various divisions that he quotes, I can only say that I have on my staff a

number of officers who have come from many different divisions in Burma and S.W. Pacific and they are all in agreement with me that the Japanese, on the whole, were very indifferent gunners.

8. I am accused of making a most dangerous statement as regards the primitive man in the jungle. The Japanese, who is a much more primitive man than the Englishman, was able, in the jungle, to fight extremely well with his somewhat primitive weapons, and knowing this he always stayed in the jungle if he possibly could. Major Irwin ignores my statement that the average soldier can adapt himself to fighting in the jungle.

I agree with Major Irwin on the need for accuracy, though I think he will find, if he reads my lecture again, that he has in many cases quoted me entirely inaccurately. Had he not done so, but confined himself to writing of his own experiences, I should not have considered it necessary to make these comments in which I have only dealt with the more important points.

C. J. BRADFORD,

*Lieut.-Colonel.*

25th September, 1945.

### THE FUTURE OF THE BATTLESHIP

*To the Editor of the R.U.S.I. Journal.*

SIR—In suggesting that the aircraft carrier has now superseded the battleship as the premier naval unit and that the "battleship" of the future should be nothing more than a very powerful, long-range A.A. battery, designed primarily to afford distant protection to carriers against high-level bombing attack, the writer of an article in the August issue of the *Journal* obviously assumes that such bombing can be sufficiently accurate, even against a fast-moving, rapidly manoeuvring target, as to constitute a serious menace, and also that the fire from the proposed "A.A. battleships" would be equally effective against high-flying aircraft. Should both these assumptions be correct, there would seem to be a reasonable case for the proposed new type, but, without possessing any specialized knowledge, may I submit that they are, to say the least, debatable points which could properly be settled only by those in full possession of all relevant technical data and the lessons of recent war experience. Should either, or both, be erroneous then there would seem to be little object in providing the special defensive type suggested, regardless of whether or not this were actually to replace the battleship in its present form or constitute an entirely separate and additional warship type.

Judging by the performance of U.S. ships against Japanese aircraft in the closing stages of the Pacific war, it seems fairly reasonable to conclude that A.A. defence can now be provided to a degree which renders low-level attack by aircraft so little likely to be successful that the threat of this can, in itself, hardly be considered a valid reason for the abandonment of the battleship. Nevertheless, the mere fact that aircraft may actually constitute a less formidable menace to the existence of the battleship than is sometimes stated is, by itself, hardly a sufficient reason for retention of the latter under modern conditions of naval warfare. Before reaching any conclusion on this point it is necessary to consider whether or not aircraft can carry out all the battleship's functions with equal efficiency and, if not, which duties they are less able to perform.

Space will not permit a full discussion of this subject here, but it may be useful to note briefly two of the more important questions which would arise in this connection:—

(a) Could carrier-borne aircraft alone prevent a force of battleships, covered by fighters from their own accompanying carriers, from attaining any important objective such as, for instance, the destruction of a convoy?

(b) Could carrier-borne aircraft maintain a sustained bombardment of coastal defences which would equal that of heavy naval guns in destructive effect?

Here, again, a far more complete knowledge of recent war experience than is ever likely to be made available to the public is essential to give anything approaching a satisfactory reply, although it can be remarked that the substitution of monitors for battleships in the latter case, as suggested in the August article, would be generally impracticable for extensive overseas operations owing to their limitations in the matter of speed and seaworthiness. The American Pacific campaigns have, on the other hand, clearly indicated the value, for such operations, of powerful, highly mobile task forces composed of both battleships and carriers.

The end of a long war, such as the recent conflict, must inevitably be a critical period in naval design and, if we are to make the most of the wealth of experience now at our disposal, it is imperative that a competent and fully representative committee should be appointed to consider this and formulate a new construction programme which would embody all the lessons which have been learned. Strong arguments can, and doubtless will, be advanced both for and against the retention of the battleship in its present or similar form, and the solution to the problem may well be that there is room in our post-war fleet for both the battleship and the carrier, although the former will no longer occupy its original predominating position and will probably have to undergo certain changes in design.

In any event, so long as any other Power sees fit to retain the battleship, it would surely be extremely unwise for us to abandon it without the most careful consideration. In this connection it is, perhaps, worth noting that the British Navy at present possesses only four really modern fast capital ships (plus one more building) and that, if the type is to be retained, further new construction should not be long delayed.

D. TRIMMINGHAM,

*Lieutenant R.N.V.R.*

November, 1945.

### THE DEATH OF SIR JOHN MOORE A CONTEMPORARY NOTE

*To the Editor of the R.U.S.I. Journal.*

SIR—The bound papers of Lieut.-General R. B. Long (Adjutant-General to the Forces in the Walcheren Expedition, 1809, and subsequently a cavalry Brigadier and Major-General in the Peninsula) are to be found in six massive volumes in the Royal United Service Institution Library; with these are three small pocket note-books containing, mostly in pencil, random notes and entries dealing mainly with the writer's activities with the Earl of Chatham in Walcheren or with Beresford in 1811. Long was in the Peninsula before the Albuera campaign, however, for he was sent in the late Autumn of 1808 to join Sir John Moore, with whom he made contact just before the battle of Corunna was fought.

The opening pages of one note-book (M.M.219.H.) were apparently used as a diary by Long during this campaign, and these faded and damp-stained pages still hold the faint pencil traces. After a page of itinerary notes, from 12th December, 1808, at Salamanca, until the 30th, at Astorga, Long's diary goes on:—

"Sunday, 15th Jan.

Went on shore and saw Sir John Moore at the outposts. Returned to Corunna and dined with him.

Monday, 15th January.

Went early to outposts for Sir John Moore—all quiet—but at about  $\frac{1}{2}$  past 3 p.m. the French began an attack which lasted until dark at night. Sir John Moore desperately wounded and Sir D. Baird the same. When the action was over returned to Corunna and attended Sir J. Moore in his last moments. He died precisely as the evening gun fired on board the Admiral's ship—8 o'clock."

The remainder of these notes deals with the embarkation of the troops, the gathering of the fleet, and the voyage back to England, under high winds, gales and danger of shipwreck, until harbour was finally made on 27th January, 1809.

T. H. MCGUFFIE,

*Lieutenant R.N.V.R.*

*(Sea Cadet Corps).*

15th October, 1945.

## GENERAL SERVICE NOTES

### THE INDIAN FORCES

The Government of India announced on 22nd October that it has had under consideration the future officering of the Royal Indian Navy, the Indian Army, and the Royal Indian Air Force, and, in agreement with His Majesty's Government, has made the following decisions:—

The grant of permanent Commissions in the Royal Indian Navy and the Indian Army will, in future, be restricted to Indians and to other persons domiciled in India who are subjects of His Majesty or of a Prince or Chief in India. The recruitment of officers to the Royal Indian Air Force is already subject to this restriction. As a temporary expedient, however, it has been decided to offer 40 regular Commissions to European officers of the Royal Indian Navy Reserve.

It will be generally recognized that the three Indian Services will still require a quota of British officers until such time as there is an adequate supply of qualified Indian officers. It has been decided, therefore, that British officers for service in the three Indian Services shall hereafter be obtained by secondments or attachments for so long as may be found necessary. These decisions do not affect the position of regular British officers already holding permanent Commissions.

### R.A.F. STAFF COLLEGE

GIFTS AND LOANS OF BOOKS TO REFERENCE LIBRARY.—The Royal Air Force Staff College is experiencing great difficulty in obtaining printed literature suitable for its Reference Library. There may be many officers (serving and retired) still in the possession of books, documents and publications who are no longer in need of them and who will be anxious to help in meeting this pressing need.

Reading matter on the following subjects would be especially appreciated: Historical, Strategic and Technical Development of Air Power; Biographies; Military, Naval and Political Histories; Economics; Psychology; and, particularly, written and spoken English and Classics.

Contribution need not invariably be of the nature of an outright gift. Donations of historical value could be retained for the reference and convenience only of students and would be available for return to their owners immediately on request. There are indeed circumstances in which it would conceivably be to the owners' advantage to have their books cared for under these conditions.

Correspondence on this subject should be addressed to the Librarian, Royal Air Force Staff College, Bracknell, Berks, enclosing a list of the books it is proposed to donate or lend.

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## NAVY NOTES

### GREAT BRITAIN

#### H.M. THE KING

The King and Queen visited Edinburgh on 26th and 27th September. An Investiture and a Victory Parade were included in the programme on the first day. On the 27th, they attended a service of thanksgiving in St. Giles' Cathedral, at which were presented and received the White Ensign flown in H.M.S. "Warspite," flagship of Admiral of the Fleet Sir Andrew (now Lord) Cunningham, at the Battle of Cape Matapan on 28th March, 1941, and in other operations in the Mediterranean; and also the Red Ensign worn by the s.s. "Queen Elizabeth" on her war-time voyages. In the Thistle Chapel of the Cathedral, Lord Cunningham was installed as a Knight of the Thistle.

On 28th September, their Majesties left for Rosyth, where they were received by the Commander-in-Chief, Admiral Sir William Whitworth. They visited H.M.S. "Rodney," flagship of Admiral Sir Henry Moore, Commander-in-Chief, Home Fleet, and inspected ships' companies. After luncheon with Admiral Moore in the "Rodney," they visited the cruisers "Birmingham" and "Dido," and, on landing at the Dockyard, inspected the ship's company of the aircraft-carrier "Illustrious," afterwards returning to Balmoral.

Surgeon Rear-Admiral (D) E. E. Fletcher, C.B.E., Deputy Director-General for Dental Services, has been appointed an Honorary Dental Surgeon to the King from 25th June, 1945.

The Rev. Irving Davies, Chaplain, R.N., has been appointed an Honorary Chaplain to the King from 5th August, 1945.

(See also Royal Marines and Royal Naval Volunteer Reserve.)

#### BOARD OF ADMIRALTY

A.C.N.S. (Air).—The Admiralty announced on 3rd August that Captain Charles E. Lambe, C.B., C.V.O., R.N., had been selected to succeed Acting Rear-Admiral L. D. Mackintosh, D.S.O., D.S.C., as Assistant Chief of the Naval Staff (Air) in August, and granted the acting rank of Rear-Admiral while holding the appointment. Acting Rear-Admiral Mackintosh would succeed Rear-Admiral A. R. M. Bridge, C.B.E., as Flag Officer, Carrier Training and Administration, in September, 1945, and would continue to serve in the acting rank of Rear-Admiral. Rear-Admiral Bridge would be given another appointment shortly.

V.C.N.S.—On 31st August, it was announced that the King had approved the appointment of Vice-Admiral Sir Rhoderick R. McGrigor, K.C.B., D.S.O., to be a Lord Commissioner of the Admiralty and Vice-Chief of the Naval Staff, in succession to Vice-Admiral Sir E. Neville Syfret, to date 1st October.

DEATH OF ADMIRAL SIR FREDERICK WAKE-WALKER.—Admiral Sir Frederick Wake-Walker, K.C.B., C.B.E., Third Sea Lord and Controller of the Navy, died suddenly at his home in London on 24th September. He succeeded Admiral Sir Bruce Fraser as Third Sea Lord in May, 1942, and formerly commanded a cruiser squadron in the Home Fleet. It was this squadron which found the German battleship "Bismarck" in the Denmark Strait in May, 1941, and shadowed her for many hours in the operations before she was destroyed. He was 57 years of age.

THIRD SEA LORD.—On 13th October, it was announced that the King had approved the appointment of Rear-Admiral C. S. Daniel, C.B.E., D.S.O., to be a Lord Commissioner of the Admiralty and Controller of the Navy, in succession to the late Admiral Sir W. Frederick Wake-Walker, to date 1st December.

## FLAG APPOINTMENTS

**RESERVE FLEET.**—The following appointment was announced on 31st August :—Rear-Admiral L. H. Ashmore, D.S.O., to be Flag Officer Commanding Reserve Fleet, in succession to Rear-Admiral C. F. Harris (retired), to date 3rd September.

**MALAYA.**—On 12th September, it was announced that the appointment had been approved of Rear-Admiral J. A. V. Morse, D.S.O., to be Flag Officer, Malaya, to date 5th September.

**NAVAL RESERVES.**—On 13th September, the Admiralty announced the appointment of Vice-Admiral C. E. Morgan, C.B., D.S.O., to be Deputy Chief of Naval Personnel and Admiral Commanding Reserves, in succession to Vice-Admiral J. G. P. Vivian, C.B. (retired), to date 7th October.

**PORTSMOUTH DOCKYARD.**—The Admiralty announced on 16th October the appointment of Rear-Admiral L. V. Morgan, C.B.E., M.V.O., D.S.C., to be Admiral Superintendent, H.M. Dockyard, Portsmouth, in succession to Vice-Admiral M. L. Clarke, to date 8th November.

**PLYMOUTH.**—On 18th October, it was announced that the King had approved the appointment of Admiral Sir Henry D. Pridham-Wippell, K.C.B., C.V.O., to be Commander-in-Chief, Plymouth, in succession to Admiral Sir Ralph Leatham, to date 27th November.

**HOME FLEET.**—On 24th October, it was announced that the King had approved the appointment of Vice-Admiral Sir E. Neville Syfret, K.C.B., to be Commander-in-Chief, Home Fleet, in succession to Admiral Sir Henry Moore, K.C.B., C.V.O., D.S.O., to date 24th November.

**WASHINGTON.**—Admiral Sir Henry Moore has been appointed as Head of the British Admiralty Delegation in Washington, in succession to Admiral of the Fleet Sir James Somerville, G.C.B., K.B.E., D.S.O., and will take up his appointment in December.

**BRITISH PACIFIC FLEET.**—On 25th October, the Admiralty announced the following appointments :—

Vice-Admiral Sir Philip L. Vian, K.C.B., K.B.E., D.S.O., who commands the First Aircraft-Carrier Squadron, has been appointed Second-in-Command, British Pacific Fleet, in succession to Vice-Admiral Sir H. Bernard Rawlings, K.C.B., K.B.E., to date 27th October. Vice-Admiral Rawlings will return to the United Kingdom early in December.

Rear-Admiral E. R. Archer, C.B., C.B.E., has been appointed Rear-Admiral (Destroyers), British Pacific Fleet, in succession to Vice-Admiral J. H. Edelsten, C.B., C.B.E., who, on relief, will assume command of the First Battle Squadron and fly his flag in H.M.S. "Anson."

## PROMOTIONS

The Admiralty announced on 28th July that Rear-Admiral (Acting Vice-Admiral) W. G. Tennant, C.B., C.B.E., M.V.O., had been promoted to Vice-Admiral in H.M. Fleet, to date 27th July, and reappointed as Flag Officer, Levant and Eastern Mediterranean.

The Admiralty announced on 18th August that Rear-Admiral V. A. C. Crutchley, V.C., C.B., D.S.C., had been promoted to Vice-Admiral in H.M. Fleet, to date 15th August, and reappointed as Flag Officer, Gibraltar and Mediterranean Approaches, and Admiral Superintendent, H.M. Dockyard, Gibraltar.

The following were announced on 28th September :—

Vice-Admiral Sir Harold M. Burrough, K.C.B., K.B.E., D.S.O., to be Admiral in H.M. Fleet, to date 25th September; and

Rear-Admiral J. H. Edelsten, C.B., C.B.E., to be Vice-Admiral in H.M. Fleet, to date 25th September.

On promotion Admiral Burrough and Vice-Admiral Edelsten were reappointed in their present appointments.

The following were announced on 17th October:—

Vice-Admiral Sir Algernon U. Willis, K.C.B., D.S.O., to be Admiral in H.M. Fleet, to date 16th October; and

Rear-Admiral E. J. P. Brind, C.B., C.B.E., to be Vice-Admiral in H.M. Fleet, to date 16th October.

On promotion Admiral Willis and Vice-Admiral Brind were reappointed in their present appointments.

#### OFFICERS LOST AT SEA WHILE SERVING AS COMMODORES OF OCEAN CONVOYS

The following Flag Officers recalled from the Retired List and other officers, all serving as Commodores of Ocean Convoys, lost their lives at sea during the war:—

<i>Name</i>	<i>Missing from</i>
Admiral Sir H. J. S. Brownrigg, K.B.E., C.B., D.S.O. ... ..	... s.s. "Ville de Tamatave" 24.1.43.
Vice-Admiral W. de M. Egerton, D.S.O. ...	... s.s. "Empire Shackleton" 28.12.42.
Vice-Admiral D. F. Moir, D.S.O. ...	... s.s. "Trehata" 8.8.42.
Vice-Admiral P. E. Parker, D.S.O. ...	... s.s. "Aquila" 19.8.41.
Vice-Admiral H. H. Smith, D.S.O. ...	... s.s. "Manchester Brigade" 29.7.40.
Vice-Admiral B. G. Washington, C.H.G., D.S.O.	... s.s. "Har Palyce" 25.8.40.
Vice-Admiral N. A. Wodehouse, C.B. ...	... s.s. "Robert L. Holt" July, 1941.
Rear-Admiral J. V. P. Fitzgerald, K.B.E. ...	... s.s. "Rotorua" 11.12.40.
Rear-Admiral J. C. Hamilton ...	... s.s. "City of Bedford" Jan., 1941.
Rear-Admiral E. J. G. Mackinnon, D.S.O. ...	... s.s. "City of Benares" 17.9.40.
Rear-Admiral H. B. Maltby ...	... s.s. "Jumna" December, 1940.
Rear-Admiral R. A. A. Plowden, D.S.O. ...	... s.s. "Sirikishna" February, 1941.
Captain A. D. H. Dibben, O.B.E., R.N. ...	... s.s. "Empire Spring" Feb., 1942.
Captain H. C. Birnie, D.S.O., R.D., R.N.R. ...	... m.v. "Bonneville" 10.3.43.
Captain J. Elliott, D.S.O., R.N.R. ...	... s.s. "Ashantian" 21.4.43.
Captain N. H. Gale, D.S.O., R.D., R.N.R. ...	... m.v. "Athelsultan" 23.9.42.
Captain R. N. Garstin, C.B.E., R.I.N. ...	... m.v. "Stentor" 27.10.42.
Captain N. T. H. Hudson, R.D., R.N.R. ...	... m.v. "Pelayo" 15.6.42.
Captain W. H. Kelly, C.B.E., D.S.O., R.D., R.N.R. ... ..	... m.v. "Adda" 7.6.41.
Captain E. Rees, D.S.O., R.D., R.N.R. ...	... s.s. "Empire Howard" 16.4.42.
Captain A. H. Young, R.D., R.N.R. ...	... s.s. "Barberrys" 26.11.42.

#### RETIREMENT

In the *London Gazette* on 21st August, it was announced that Engineer Vice-Admiral Sir Frederick R. G. Turner, K.C.B., O.B.E., had been placed on the Retired List (26th April, 1945).

#### HONOURS AND AWARDS

##### RESIGNATION HONOURS

On 14th August, it was announced that the King had approved (among others) the following honours and awards on the resignation of Mr. Churchill:—

*Baron.*—Admiral of the Fleet Sir Andrew B. Cunningham, First Sea Lord and Chief of the Naval Staff since 1943. (In the *London Gazette* on 12th October, it was announced that the First Sea Lord had taken the title of Baron Cunningham of Hyndhope, of Kirkhope, in the County of Selkirk, dated 15th September).

*Knight.*—Captain Richard Pike Pim, R.N.V.R., lately Supervisor of the Prime Minister's Defence Map Room and Head of the Upper War Room, Admiralty.

*C.M.G.*—Commander Charles Ralfe Thompson, R.N., Personal Assistant to the Minister of Defence (Mr. Churchill), 1940-1945.

#### ORDER OF THE BATH

*C.B.*—The following appointments as C.B. were announced on 4th September for distinguished services during the European War:—

Captain J. Hughes-Hallett, D.S.O., R.N.

Rear-Admiral F. E. P. Hutton.

Rear-Admiral H. A. Packer, C.B.E.

Commodore (First Class) W. R. Slayter, D.S.O., D.S.C.

#### ORDER OF THE BRITISH EMPIRE

*K.B.E.*—On the occasion of the surrender of Japan, the King has given orders for the promotion of Vice-Admiral Sir H. Bernard Rawlings, K.C.B., O.B.E., to be a K.B.E., for good services rendered while in command of the British Task Force operating in Japanese waters (4th September, 1945).

*C.B.E.*—Rear-Admiral C. E. Turle, D.S.O. (Retired), for excellent service in the maintenance of law and order in Greece during the period of the civil war, 1944-45 (14th August).

Acting Captain D. C. Ingram, O.B.E., D.S.C., R.N., for gallantry, tenacity and undaunted devotion to duty in patrols in the Aegean area throughout one of the most dangerous periods of the war in the Mediterranean (28th August).

The following promotion and appointments as C.B.E. are made for distinguished services during the European War (4th September):—

Captain (S) A. S. Beall, R.N.

Acting Captain H. C. Browne, D.S.O., R.N.

Captain (S) J. R. Cundall, R.N.

Acting Captain M. J. Evans, O.B.E., D.S.C., R.N.

Commodore (First Class) H. W. Faulkner, D.S.O.

Commodore (Second Class) J. R. S. Haines.

Commodore (First Class) R. M. J. Hutton, D.S.O.

Captain J. H. Lewes, D.S.C., R.N.

Captain P. B. R. W. William-Powlett, D.S.O., R.N.

The following appointments as C.B.E. were announced on 7th September:—

Captain C. F. B. Bowlby, D.S.C., R.N., for excellent service in the organization of special operations in the Near East.

Captain R. E. F. McQ. McKenzie, D.S.C., R.N. (Retired), for good organization and outstanding leadership in the opening up of the Port of Leghorn under exceptionally difficult conditions.

Captain J. F. McKenzie, R.N.V.R., for outstanding courage, leadership and skill as Deputy Principal Salvage Officer, North-West Europe, in salvage operations for opening up the Port of Ostend.

(See also Royal Marines.)

#### ROYAL VICTORIAN ORDER

*K.C.V.O.*—The following appointment was announced on 10th August:—

Vice-Admiral the Right Hon. William Spencer, Earl Granville, C.B., D.S.O. (6th July, 1945.)

#### PERSONNEL

**MEDICAL DIRECTOR-GENERAL.**—It was announced on 29th September that Surgeon Rear-Admiral H. St. C. Colson, C.B.E., had been appointed to be Medical Director-General of the Navy, in succession to Surgeon Vice-Admiral Sir Sheldon F. Dudley.

**"Y" SCHEME CLOSED.**—The closing of the "Y" or youth scheme of entry into the Navy was announced by the Admiralty with effect from 17th September. Candidates then on the waiting list were to be interviewed by the selection boards and enrolled if suitable, but no further applications were to be considered after 15th September. The scheme, started in 1941, has enabled boys who wished to do their war service with the Navy to be interviewed before calling-up age and to be enrolled in an unpaid reserve. Over 50,000 candidates have been interviewed and nearly 30,000 enrolled.

#### MATERIAL

**H.M.S. "Howe".**—The battleship "Howe" arrived at Cape Town on 14th September to be present at the opening of the new graving dock. It was then made known that the "Howe's" displacement is not 35,000 tons, as hitherto believed, but 45,000. She was the last of her class to be completed, and the many improvements incorporated added to her tonnage.

**H.M.S. "HERCULES" LAUNCHED.**—The last of the "Colossus" class of intermediate aircraft carriers, H.M.S. "Hercules," was launched at Newcastle-on-Tyne on 22nd September. The "Edgar," of the same class, was fitting out near by, and on the next berth the keel plates of another aircraft carrier of larger dimensions had been laid.

**DESTROYERS LAUNCHED.**—H.M.S. "Talavera" was launched from the shipyard of John Brown and Co. on 27th August. H.M.S. "Albuera" was launched from the Walker-on-Tyne shipyard of Vickers-Armstrongs on 28th August. Both are destroyers of the "Battle" class.

**SUBMARINES LAUNCHED.**—The submarine "Achates" was launched at Devonport Dockyard on 20th September. She is the second of the "A" class to be launched at Devonport, the first being the "Ace" launched some months earlier. Another submarine of the same class was launched at Barrow on 24th September.

**DISPOSAL OF SMALL CRAFT.**—The Admiralty has for disposal a number of auxiliary war vessels, including landing craft of all types. An organization set up some time ago, with Sir Noel Macklin as Director of Small Craft Disposal, will continue to deal with yachts, launches and boats. Commercial types of vessels, such as tugs, lighters and coasters, will be sold by the Ministry of War Transport. The Admiralty will dispose of the remainder, including fishing vessels and landing craft, and inquiries should be addressed to the Director of Navy Contracts, Branch 8D, Foxhill Hutments, Bath, Somerset.

#### ORGANIZATION

**MALTA AS FLEET HEADQUARTERS.**—It was announced on 28th September that Malta had again become the headquarters of the Mediterranean Fleet. Admiral Sir John Cunningham, Commander-in-Chief, moved there from the Royal Palace, Caserta, near Naples. A command post has been established in Naples for liaison with Allied Headquarters.

**PACIFIC FLEET.**—Admiral Sir Bruce Fraser, Commander-in-Chief of the British Pacific Fleet, stated on 24th September at Chungking, where he had gone to visit General Chiang Kai-shek, that Britain would keep a small fleet in the Far East. Her Pacific Fleet now consisted of three battleships, four carriers, nine cruisers and thirty-two destroyers. British naval bases in the Pacific would not be increased beyond the present establishments at Singapore, Hong Kong, and in Australia.

**CHANNEL BASES.**—The United States Navy's advanced amphibious base at Falmouth was turned over on 31st July to the Royal Navy. At the same time, the Royal Ordnance Depot at Portsmouth was formally handed back by the U.S. Army to the War Office, and the airfield at Dunkeswell, Devon—the only one in Europe used by the U.S. Naval Air Service, was handed back to the R.A.F., and will be used by Transport Command. With the return by the Royal Navy of the administration of the Port of Calais to the French

Navy on 1st August, all ports in Northern France were again under the control of their rightful owners. The only British Naval Officers remaining in Calais are a liaison staff and those in charge of British leave and cargo traffic.

#### WOMEN'S ROYAL NAVAL SERVICE

Queen Mary, at her own request, on 26th September inspected officers of the W.R.N.S. in training at the R.N. College, Greenwich. Her Majesty saw Wren cooks at work in the galley and patients in the sick bay. She also asked to see the famous Painted Hall now the officers mess of the College.

Dame Vera Laughton Matthews, Director of the W.R.N.S., visited Germany in September, to inspect W.R.N.S. units at the naval ports.

Of married Wren officers, 26 per cent. have waived their demobilization priorities and will remain in the Service until demobilized in their respective age groups at the same time as unmarried officers. Ten per cent. of married Wren ratings have exercised a similar option.

**RECRUITING.**—Recruiting for cooks and stewards only was re-opened in July, and in August a limited number of Writers (Pay) were required. Recruiting is now taking place in the Channel Islands.

**AWARDS.**—First Officer Trubody, W.R.N.S., has been awarded the American Bronze Star Medal for meritorious service as Staff Assistant to the Principal Administrative Officer, S.E.A.C. The award was presented to First Officer Trubody by Lieutenant-General R. A. Wheeler, Deputy Supreme Allied Commander, S.E.A.C.

**EXHIBITIONS.**—Numbers of Wrens have taken part in an Allied Naval Exhibition in Rotterdam during August. This was a great success and was later transferred to Amsterdam.

#### ROYAL NAVAL VOLUNTEER RESERVE

In pursuance of His Majesty's pleasure, Surgeon Captain F. L. Cassidi, V.D., R.N.V.R., has been appointed an Honorary Surgeon to the King, to date 29th March, 1945.

#### ROYAL MARINES

In pursuance of His Majesty's pleasure, Colonel Second Commandant (acting Colonel Commandant, temporary Brigadier) T. H. Jameson, D.S.O., O.B.E., has been appointed a Royal Marine Aide-de-Camp to the King, in place of Colonel Commandant (temporary Brigadier) (acting Major-General) W. B. F. Lukis, C.B.E., promoted to Major-General (5th August, 1945).

**PROMOTIONS.**—Colonel Commandant (temporary Brigadier) (acting Major-General) W. B. F. Lukis, C.B.E., A.D.C., to be Major-General (5th August, 1945). Colonel Second Commandant (acting Colonel Commandant) (temporary Brigadier) A. N. Williams, C.B.E., to be Colonel Commandant (temporary Brigadier) (5th August, 1945). Lieutenant-Colonel (acting Colonel) C. R. W. Lamplough, C.B.E., D.S.C., to be Colonel Second Commandant (5th August, 1945).

**C.B.E.**—Lieutenant-Colonel J. E. Leech-Porter, O.B.E., R.M., was on 6th August promoted to C.B.E. for outstanding services and devotion to duty during assault operations in Northern France.

#### DOMINIONS AND COLONIES

##### AUSTRALIA

**NEW DESTROYER.**—It was announced at Melbourne on 7th August that the newly-commissioned Australian destroyer "Bataan" had joined the Pacific Fleet at a forward base. She was so named as a return compliment to that paid to Australia when the United States named one of their cruisers the "Canberra."

## CANADA

**NEW DEFENCE MINISTER.**—It was announced at Ottawa on 21st August that the resignation of General Andrew McNaughton as Minister of Defence had been accepted, and that he would be succeeded by Mr. Douglas Abbott, formerly Navy Minister, who would hold the two portfolios.

**BASES CLOSED.**—It was announced on 19th September that all war-time operational bases of the Royal Canadian Navy were to be closed except Halifax and Sydney, Nova Scotia, and Esquimalt, British Columbia. The list of bases and establishments to be closed included those at Gaspé (Quebec), Shelbourn (Nova Scotia), defences of the Strait of Canso at Port Hawkesbury and Mulgrave (Nova Scotia), a small installation at Louisbourg (Nova Scotia), and bases at Montreal, at Quebec, and at St. John (New Brunswick).

## SOUTH AFRICA

**NEW GRAVING DOCK.**—The new graving dock at Cape Town was officially opened on 18th September by Chief Justice N. J. de Wet, Officer Administering the Government. He announced that the dock, which put Cape Town high among the ports of the world, would be named after Mr. Sturrock, the Minister of Transport, under whose administration it was conceived and built. The dock has a normal length of 1,118 feet, but, with an emergency stop in use, the length is extended to 1,212 feet. It is thus exceeded in length only by the dry dock at Toulon, which it exceeds in breadth.

**BASE AT DURBAN.**—Writing of the war-time base of the Royal Navy at Salisbury Island, Durban, after the censorship was lifted on 4th September, the Durban Correspondent of *The Times* said:—

"In the six years of the war this mangrove tree island—a former week-end pleasure resort, was converted into a township capable of accommodating several thousand men, with streets, an electric railway, and a naval base larger than Simonstown. Concrete wharves designed for all types of warships have been built on what used to be mud banks, and long lines of workshops, with heavy steel gantries and served by railway lines linked with the Bluff across the bay by a new causeway, have been constructed."

Apart from harbourage, little use has thus far been made by the Navy of the facilities, and until the work is completed it is unlikely that any decision will be made about the future of the base.

## FOREIGN NAVIES

## CHINA

**BRITISH LOAN OF WARSHIPS.**—The British Government has agreed to lend a light cruiser and other warships of the escort and destroyer types to the Chinese Navy. Fifty young Chinese naval officers are now being trained in Britain.

## DENMARK

**LOAN OF BRITISH CORVETTE.**—The British Corvette "*Geranium*" has been acquired for the Royal Danish Navy, and was commissioned with a Danish crew at Dartmouth on 1st October.

## GERMANY

An Admiralty statement in May of this year gave the following particulars of what remain of the German fleet:—

*Battle Cruiser* (26,000 tons)—

"*Gneisenau*," sunk as a blockship at Gdynia.

*Armoured Ship* (12,000 tons)—

"*Lutzow*," sunk at Swinemunde.

*Old Battleships (13,000 tons)—*

"Schlesien," sunk at Swinemunde.

"Schlesweig-Holstein," scuttled or used as a blockship at Gdynia.

*Cruisers (8-inch)—*

"Prinz Eugen," effective, at Copenhagen.

"Admiral Hipper," stranded in Kiel.

"Seydlitz," blown up in Königsberg.

*Cruisers (6-inch)—*

"Nürnberg," effective, at Copenhagen.

"Emden," stranded in Kiel.

"Kola," sunk in Wilhelmshaven.

"Leipzig," damaged in Aabenraa.

*Destroyers, etc.—*

Eleven at Kiel; three, and two T.B.D.'s at Copenhagen; ten and nine T.B.'s, also about 1,200 small naval craft, at various ports now in Allied hands.

**UNITED STATES**

In *The Times* of 16th October, the Naval Correspondent stated that the following are the general lines on which, it has been made known in Washington, the U.S. Navy is to be organized:—

There will be two main fleets, Atlantic and Pacific, comprising between them—in proportions not announced—five battleships and ten aircraft carriers; the number of cruisers and lesser warships to be kept in "battle commission" has not been disclosed. For the time being the five battleships will be those that have been completed of the "Iowa" class—45,000 tons, nine 16-in. guns—and the carriers will be three of the 45,000 ton "Midway" class and seven of the 27,000 ton "Essex" class.

Thirteen other battleships and 27 carriers will be in the Reserve Fleet—to be employed on training—while six of the oldest battleships, veterans of the 1914-18 war, are to be scrapped—the U.S.S. "Arkansas," "New York," "Texas," "Nevada," "Pennsylvania" and "Mississippi."

There will be 7,928 aircraft with a further 3,652 in reserve; an air contingent substantially larger than before Pearl Harbour.

**NAVAL LOSSES.**—It has been officially stated that the U.S. Navy's losses in the War have amounted to 107 surface ships. These include 2 battleships, 12 aircraft carriers, 9 cruisers, 67 destroyers, 1 target ship and 1 seaplane tender. The submarine losses amount to 42.

Air attacks were responsible for sinking 31 of the surface ships. In surface actions, gunfire and torpedoes put down 7 cruisers, 1 carrier, 2 destroyer escorts, 16 destroyers and a gunboat.

Air combined with under-water attack sank the carriers "Yorktown" and "Hornet."

Submarine torpedoes accounted for 1 cruiser, 1 carrier, 2 escort carriers, 10 destroyers, 4 destroyer escorts and a gunboat.

Six battleships were damaged in the attack on Pearl Harbour. Since then 2 battleships, the "South Dakota" and the "Maryland," have sustained damage in action, but the reports of damaged battleships are not complete.

## ARMY NOTES

### H.M. THE KING

The King, accompanied by The Queen, took the Salute at a March Past of the Training Battalion, Grenadier Guards, at Windsor on 7th August. Prior to the March Past, the Battalion was inspected by The Princess Elizabeth (Colonel, Grenadier Guards).

Three hundred women of the Mechanized Transport Corps were inspected by The Queen in the garden of Buckingham Palace on 15th August. The Corps is to be disbanded at the end of the year.

The Princess Elizabeth inspected members of No. 1 Motor Transport Training Centre, A.T.S., at Camberley on 3rd August and took the Salute at a March Past.

The Princess Elizabeth (Colonel, Grenadier Guards) inspected the 3rd Battalion, Grenadier Guards at Hawick, Roxburghshire on 25th September and took the Salute at a March Past.

The Princess Elizabeth was present at the Passing-out Parade of No. 100 O.C.T.U., Royal Armoured Corps at the Royal Military College, Sandhurst, on 27th October.

The Princess Royal, Controller-Commandant, was present at an A.T.S. Conference in Leeds on 24th August. She visited No. 9 A.T.S. Training Centre at Pontefract on 27th August. On 4th September she presided at a committee meeting of the A.T.S. Benevolent Fund in London. She visited a unit of the A.T.S. at the Command Ordnance Depot at Feltham in the London District on 6th September. She inspected A.T.S. units at Ripon on 26th September.

The Princess Royal witnessed the ceremony of the Conferment of Freedom of Entry on the West Yorkshire Regiment at Leeds on 1st September. She visited No. 2 Military Unit in York on 21st September.

The Princess Royal, Colonel-in-Chief, on behalf of the Royal Corps of Signals, made a presentation to officers of the United States Signals Corps at Catterick on 26th September. (For further details see page 541).

The King has been pleased to approve the following appointments :—

TO BE AIDES-DE-CAMP TO THE KING.—Colonel (hon. Brigadier) P. J. Slater, D.F.C., T.D. (27th March, 1945); Colonel (acting Brigadier) T. T. J. Sheffield, O.B.E., T.D. (5th January, 1944); Colonel (temporary Brigadier) W. A. F. L. Fox-Pitt, D.S.O., M.V.O., M.C. (4th September, 1945).

TO BE HON. PHYSICIAN TO THE KING.—Major-General S. R. Burston, C.B., C.B.E., D.S.O., E.D., Australian Army Medical Corps.

TO BE HON. SURGEON TO THE KING.—Colonel M. S. Joshi, F.R.C.S., L.R.C.P., Indian Medical Service (6th March, 1945).

TO BE COLONELS COMMANDANT.—of the Royal Artillery, Major-General (hon. Lieut-General) H. R. S. Massy, C.B., D.S.O., M.C. (14th July, 1945); of the Royal Engineers, Major-General (temporary Lieut-General) A. E. Grasett, K.B.E., C.B., D.S.O., M.C. (12th July, 1945); of the Royal Tank Regiment, R.A.C., Field-Marshal Sir Bernard Montgomery, G.C.B., D.S.O.

TO BE REGIMENTAL COLONELS.—of the 11th Hussars, R.A.C., Colonel (temporary Brigadier) J. F. B. Combe, D.S.O., (12th July, 1945); of the Coldstream Guards, Lieut-General Sir H. Charles Loyd, K.C.B., D.S.O., M.C. (13th September, 1945); of The Argyll and Sutherland Highlanders, Colonel (temporary Major-General) G. H. A. MacMillan, C.B., C.B.E., D.S.O., M.C. (1st October, 1945).

## ARMY COUNCIL

The King was pleased by Letters Patent under the Great Seal bearing date 24th September, 1945, to appoint the following to be His Majesty's Army Council :—

The Right Hon. J. J. Lawson, President.  
Colonel Harry, Baron Nathan, T.D., Vice-President.  
Field-Marshal Sir Alan F. Brooke, G.C.B., D.S.O., A.D.C. General.  
General Sir Ronald F. Adam, Bt., K.C.B., D.S.O., O.B.E.  
General Sir Thomas S. Riddell-Webster, K.C.B., D.S.O.  
Lieut.-General Sir Archibald E. Nye, K.B.E., C.B., M.C.  
Lieut.-General Sir Sidney C. Kirkman, K.B.E., C.B., M.C.  
Captain F. J. Bellenger, M.P.  
Sir Frederick C. Bovenschen, K.C.B., K.B.E.  
Sir Eric B. B. Speed, K.C.B., K.B.E., M.C.

## HONOURS AND AWARDS

*Bar to Victoria Cross.*—The King has approved the award of a bar to the Victoria Cross to Captain C. H. Upham, V.C., New Zealand Military Forces, for superb gallantry and leadership in the Western Desert on the night of 14th July, 1942. This is only the third time since the decoration was instituted in 1856 that a bar to the V.C. has been awarded.

*Victoria Cross.*—The King has approved the award of the Victoria Cross to—

(a) Corporal R. R. Rattey, Infantry, Australian Military Forces—for outstanding bravery and determination in the South-West Pacific on 22nd March, 1945.

(b) Rifleman Lachhiman Gurung, 8th Gurkha Rifles, Indian Army—for outstanding gallantry and extreme devotion to duty in face of almost overwhelming odds in Burma on the night of 12th May, 1945.

(c) Corporal F. G. Topham, 1st Canadian Parachute Battalion—for sustained gallantry of the highest order in Germany on 24th March, 1945.

(d) Major (temporary) A. F. E. V. S. Lassen, M.C., General List\* (posthumous)—for superb gallantry and devotion to duty in Italy on the night of 8th April, 1945.

(e) Lieutenant A. Chowne, M.M., 2/2nd Australian Infantry Battalion, Australian Military Forces (posthumous)—for most conspicuous bravery, brilliant leadership and devotion to duty in New Guinea on 25th March, 1945.

(f) Private E. Kenna, 2/4th Australian Infantry Battalion, Australian Military Forces—for magnificent courage at Wewak in the South-West Pacific on 15th May, 1945.

*George Cross.*—The King has approved the award of the George Cross, in recognition of most conspicuous gallantry in carrying out hazardous work in a very brave manner, to—

(a) Lance-Naik Islamuddin, 9th Jat Regiment, Indian Army.

(b) Signalmán K. Smith, Royal Signals (posthumous).

The following were included amongst awards announced on 2nd August in recognition of gallant and distinguished services in North-West Europe :—

*K.B.E.*—Lieut.-General (temporary) A. E. Grasett, C.B., D.S.O., M.C.

*C.B.*—Major-Generals (temporary) R. N. Gale, D.S.O., O.B.E., M.C. and L. B. Nicholls, C.B.E., and K. W. D. Strong, O.B.E.; Major-General (acting) C. S. Napier, C.B.E.; Brigadier (temporary) E. E. Mockler-Ferryman, C.B.E., M.C.

The following awards were announced on 17th August :—

*To be a Baron.*—Field-Marshal Sir Alan Brooke, G.C.B., D.S.O., Chief of the Imperial General Staff since 1941. (His title was gazetted on 19th October as Baron Alanbrooke, of Brookeborough in the County of Fermanagh.)

\* Major Lassen was of Danish birth.

*K.B.E.*—Major-General M. R. Jefferis, C.B.E., M.C., for original work in connection with the development of special war weapons under the Minister of Defence.

*C.H.*—General Sir Hastings Ismay, K.C.B., D.S.O., Chief of Staff to the Minister of Defence since 1940.

The following were included amongst awards announced on 13th September in recognition of gallant and distinguished services in Burma :—

*C.B.*—Major-Generals (temporary) H. L. Davies, C.B.E., D.S.O., M.C., Indian Army, and A. H. J. Snelling, C.B.E., Indian Army.

The following were included amongst awards announced on 20th September in recognition of gallant and distinguished services in Italy :—

*C.B.*—Major-Generals (temporary) R. G. Lewis, C.B.E., and W. A. M. Stawell, C.B.E., M.C., and W. S. Tope, C.B.E., M.I.Mech.E.; Brigadier (temporary) H. S. K. Mainwaring, C.B.E., D.S.O.

The following award (to be dated 25th June, 1943) was announced on 20th September in recognition of gallant and distinguished services in the defence of Calais in May, 1940 :—

*C.B.*—Brigadier (acting) C. Nicholson, 16/5th Lancers, R.A.C. (since died).

The following award was announced on 18th October in recognition of gallant and distinguished services in the Mediterranean theatre of war :—

*K.C.B.*—Lieut.-General (temporary) W. D. Morgan, C.B., D.S.O., M.C., Supreme Allied Commander, Mediterranean Theatre.

#### APPOINTMENTS

The following appointments have been announced :—

*To be Governor-General of Canada.*—Field-Marshal the Hon. Sir Harold Alexander, G.C.B., C.S.I., D.S.O., M.C.

*To be Lieut.-Governor of Jersey.*—Major-General (temporary Lieut.-General) Sir Edward Grasett, K.B.E., C.B., D.S.O., M.C. *vice* the Lieut.-Governor designate, Major-General F. G. Hyland, C.B., C.M.G., who was unable to take up the appointment owing to ill-health.

*To be G.O.C. Persia-Iraq Command.*—Major-General R. A. Savory, C.B., D.S.O., M.C.

*British Commander in Berlin.*—Major-General E. P. Nares, C.B.E., M.C. arrived in Berlin on 27th August to take over command of the British troops there and to act as British representative on the Allied Kommandatura.

*To be Lieut.-Governor and Secretary, Royal Hospital, Chelsea.*—Major-General F. V. B. Witts, C.B., C.B.E., D.S.O., M.C. (15th October, 1944).

*Allied Land Forces, South-East Asia.*—It was announced on 3rd September that General Sir William Slim, K.C.B., C.B.E., D.S.O., M.C. had recently succeeded Lieut.-General Sir Oliver Leese, Bt., K.C.B., C.B.E., D.S.O. in command of Allied Land Forces, South-East Asia.

*To be Governor-General of New Zealand.*—Lieut.-General Sir Bernard Freyberg, V.C., K.C.B., K.B.E., C.M.G., D.S.O.

*To be Deputy Chief of the Imperial General Staff.*—Lieut.-General Sir Sidney Kirkman, K.B.E., C.B., M.C.

*To be Director of the Prisoner of War Directorate at the War Office.*—Major-General V. Blomfield, D.S.O.

*Special Appointments in India.*—Major-General (acting Lieut.-General) A. R. Godwin-Austin, C.B., O.B.E., M.C. (7th September, 1945); Major-General (acting Lieut.-General) C. M. P. Durnford, C.B., C.I.E., Indian Army (12th September, 1945).

*To be Supreme Allied Commander, Mediterranean Theatre.*—Lieut.-General Sir W. D. Morgan, K.C.B., D.S.O., M.C.

#### PROMOTIONS

The following promotions have been announced :—

*General.*—To be General :— Lieut.-General Sir William J. Slim, K.C.B., C.B.E., D.S.O., M.C. (1st July, 1945).

*Lieut.-Generals.*—The following Major-Generals (temporary or acting Lieut.-Generals) to be Lieut.-Generals :—Sir Daril G. Watson, K.C.B., C.B.E., M.C. (19th July, with seniority 1st June, 1944) ; Sir Philip Christison, Bt., K.B.E., C.B., D.S.O., M.C. (8th September, 1945, with seniority 15th August, 1944) ; Sir F. W. Messervy, K.B.E., C.B., D.S.O., Indian Army (1st June, 1945, with seniority 3rd April, 1944).

The following Major-General (acting Lieut.-General) to be temporary Lieut.-General :— C. F. Keightley, C.B., D.S.O., O.B.E. (2nd August, 1945).

The following Major-General to be acting Lieut.-General :—C. W. Toovey, C.B., C.B.E., M.C., Indian Army (1st June, 1945).

The following Major-Generals to be local Lieut.-Generals :—P. Neame, V.C., C.B., D.S.O., and Sir Edward Grasett, K.B.E., C.B., D.S.O., M.C. (both 25th August, 1945).

*Major-Generals.*—The following Colonels (temporary Major-Generals) to be Major-Generals :—E. A. Sutton, C.B.E., M.C., late R.A.M.C. (1st August, 1945) ; F. E. W. Simpson, C.B., D.S.O. (19th July, 1945, with seniority 15th July, 1944) ; P. G. S. Gregson-Ellis, C.B., O.B.E. (8th September, 1945, with seniority 16th July, 1944) ; F. J. Alfieri, C.I.E., Indian Army (1st June, 1945, with seniority 4th June, 1944) ; H. R. Briggs, D.S.O., Indian Army (16th July, 1945, with seniority 10th February, 1945) ; L. H. Cox, C.B., C.B.E., M.C. (25th September, 1945, with seniority 14th June, 1943).

The following Colonels (acting Major-Generals) to be temporary Major-Generals :— C. F. Loewen, C.B.E. (24th July, 1945) ; C. M. Barber, D.S.O. (3rd August, 1945) ; H. Redman, C.B.E. (4th August, 1945) ; W. H. A. Bishop, O.B.E. (4th August, 1945) ; C. P. W. Perceval, C.B.E., D.S.O. (1st September, 1945) ; D. Beanland, O.B.E., Indian Army (15th May, 1945) ; A. H. Hornby, C.B.E., M.C. (1st June, 1945) ; E. I. C. Jacob, C.B., C.B.E., B.A. (8th September, 1945) ; K. E. S. Stewart, M.C. (7th January, 1945) ; W. H. B. Mirrless, C.B., D.S.O., M.C. (28th March, 1943) ; P. A. Ullman, O.B.E. (9th October, 1945) ; R. K. Arbuthnott, C.B.E., D.S.O., M.C. (10th October, 1945).

The following Lieut.-Colonels (acting Major-Generals) to be temporary Major-Generals and War Subs. Colonels :—L. G. Whistler, D.S.O., The Royal Sussex Regiment (22nd June, 1945) ; J. Y. Whitfield, D.S.O., O.B.E., The Queen's Royal Regiment (26th July, 1945) ; H. Murray, D.S.O., The Queen's Own Cameron Highlanders (18th August, 1945) ; R. A. Hull, D.S.O., 17/21st Lancers, R.A.C. (12th August, 1945) ; W. J. Cawthorn, C.I.E., C.B.E., I.A. (21st November, 1943) ; F. A. M. B. Jenkins, C.B.E., D.S.O., M.C., I.A. (12th January, 1945) ; W. D. A. Lentaigue, C.B.E., D.S.O., I.A. (30th March, 1945) ; A. J. H. Snelling, C.B.E., M.C., I.A. (12th October, 1944).

The following Colonels (temporary Brigadiers) to be acting Major-Generals :— R. H. R. Steward, C.B.E., D.S.O., M.C. (13th January, 1945) ; W. F. Hasted, C.I.E., C.B.E., D.S.O., M.C. (1st July, 1945).

The following Lieut.-Colonels (temporary Brigadiers) to be acting Major-Generals :— M. R. Jefferis, C.B.E., M.C., Royal Engineers (15th May, 1945) ; C. H. Boucher, C.B.E., D.S.O., Indian Army (19th June, 1945) ;

The following War Subs. Lieut.-Colonels (temporary Brigadiers) to be acting Major-Generals :—A. J. H. Cassels, C.B.E., D.S.O., The Seaforth Highlanders (28th May, 1945) ; W. P. Oliver, O.B.E., Royal West Kent Regiment (3rd August, 1945) ; C. D. Packard, D.S.O., O.B.E. (11th September, 1945).

The following to be local Major-General :—War Subs. Lieut.-Colonel (temporary Brigadier) V. Blomfield, D.S.O., The Border Regiment (1st August, 1945).

## WAR CASUALTIES

Casualties in the British Army from 3rd September, 1939, to 31st August, 1945, were:—

Killed and died of wounds	...	...	...	...	105,872	
Died of injuries and accidents	...	...	...	...	18,735	
Died of disease whilst prisoners of war	...	...	...	...	6,319	
			Total Deaths	...		130,926
Wounded	...	...	...	...		239,619
Missing (This figure has since been reduced)	...	...	...	...		8,882
Prisoners of war and internees	...	...	...	...		41,109
(This total has since been much reduced).						

## GENERAL

**B.A.O.R.**—On 24th August, it was announced that with the completion of its task the British Liberation Army would henceforth be called the British Army of the Rhine (B.A.O.R.)

**ARMY SCHOOL OF EDUCATION.**—Eltham Palace, in Kent, was opened on 25th October by Lord Nathan, Under-Secretary of State for War, as the permanent home of the Army School of Education. Eltham Palace will be, in Lord Nathan's words, the Army's educational laboratory, the training college for the Army's teachers and the home of the Army Educational Corps.

**DISBANDMENT OF COMMANDOS.**—It was announced on 25th October that the Army Commandos are to be disbanded, though some of the Royal Marine units are to be retained.

**CITY FREEDOMS.**—The Freedom of Guildford was conferred on The Queen's Royal Regiment on 29th September, that of Hereford on The Herefordshire Regiment on 29th September, and the Freedom of Scarborough on The Green Howards on 26th October.

**ROYAL TANK REGIMENTS.**—It was announced on 21st September that the King has approved of battalions of the Royal Tank Regiment being redesignated regiments—1st Royal Tank Regiment, 2nd Royal Tank Regiment, and so on in sequence.

**A.B.C.A.**—In an address given on 21st September the Adjutant-General, Sir Ronald Adam, claimed for the Army Bureau of Current Affairs that at a modest computation it had, first, substituted the habit of rational discussion for the anarchy of barrack-room argument. Secondly, it had trained thousands of subalterns in the ticklish art of "taking the chair"; and he hoped that this experience in man-management, thus acquired in the hard school of trial and error, would stand those officers in good stead when they went into commerce, industry, or politics. Thirdly, A.B.C.A. had done far more than promote and equip discussion groups. It had installed and serviced thousands of information rooms throughout the Army. It had been a publishing concern, issuing some of the most brilliant visual aids ever seen in this country. For the last two years it had developed documentary drama, and its celebrated plays on current affairs were said to have rivalled E.N.S.A. as an attraction in garrison theatres. Fourthly, A.B.C.A. had brought home to thousands of women, for the first time, a realization of their responsibilities as citizens and given them the experience of forming their own opinions instead of relying on those of their menfolk. But A.B.C.A.'s most remarkable feat had slipped through unobserved. It had established in the Army the principle of compulsory adult education. That was a revolution.

**SIGNALS' GIFT TO U.S. CORPS.**—On 26th September the Princess Royal, as Colonel-in-Chief of the Royal Corps of Signals, presented to representative officers of the Signal Corps of the United States Army a bronze statue of Mercury (the badge of the British corps), which they will take with them to their signal school at Fort Monmouth. On behalf of the United States Signal Corps, Major-General Francis Lanahan, Jr., accepted the figure as a "heartwarming reminder of very difficult tasks accomplished together."

The memento which the Americans take back with them was found in Bologna by a Royal Signals unit, and duly liberated. It weighs 16½ cwt., and was known there as "Signalman Jimmy," "Jimmy" being the name by which the emblem of the corps is customarily known.

**THE HAMPSHIRE REGIMENT.**—The Freedom of the City of Winchester was conferred upon The Hampshire Regiment on 10th September. The ceremony was attended by 400 officers and men drawn from all battalions of the Regiment. They were led by Lieut.-Colonel J. M. Lee, D.S.O., who has commanded the 1st, 2nd and 7th Battalions during this war.

A Memorial to the men of the four battalions of the Hampshire Regiment who lost their lives at the Salerno landing and in the subsequent fighting in September, 1943, has been dedicated in the Chapel of St. Martin and St. George at Pontecagnano, about six miles East of Salerno.

**DANISH VOLUNTEERS FOR BRITISH ARMY.**—It was officially announced in Copenhagen on 4th September that agreement had been reached with the British Government for Danish citizens to be allowed to join the British Army. Volunteers must be aged from 18 to 32, and service will be for three years, mainly in the British Colonies.

**CORPS GIFT TO BRUSSELS.**—As a permanent token of the gratitude of the men of the 30th Corps to the citizens of Brussels for their "wonderful hospitality" since their liberation, Lieutenant-General B. G. Horrocks on 14th August presented to the Burgomaster of Brussels a silver shield, bearing the corps sign of the charging boar.

Speaking in French, he told the Burgomaster that the presentation was on behalf of the men of his corps, which had liberated Belgium—the men of the Guards Armoured Division, the 11th Armoured Division, the 8th Armoured Brigade, and the 50th Infantry Division.

## CANADA

**FREEDOM OF ALDERSHOT.**—On 26th September the Freedom of the Borough of Aldershot was conferred on the Canadian Army oversea. The occasion was unique as being the first time that any British community has presented its Freedom to a complete visiting army.

The ceremony was attended by a specially formed battalion of 1,000 Canadian troops and a detachment of the Canadian Women's Army Corps. The Mayor of Aldershot (Alderman J. W. White) was accompanied on the platform by members of the town council and by Lieut.-General P. J. Montague (former Chief of Staff to the Canadian Army oversea), Major-General D. C. Spry, commander of the Canadian troops in England, Major-General E. W. Weeks and other Canadian officers of high rank.

**"KHAKE UNIVERSITY."**—A university for Canadian troops in England and the European theatre, known as the "Khaki University of Canada," was opened by Field-Marshal Montgomery at Leavesden (Herts) on 27th September. It will provide professional and other courses for Canadian Servicemen pending their demobilization. When opened, the "Khaki University" had an enrolment of 565 students who will take six-month courses in various subjects.

## SOUTH AFRICA

**PEACE-TIME ARMY.**—A statement issued by Defence Headquarters on 23rd October said that the strength of the Active Citizen Force in future will be 28 infantry battalions, 10 artillery regiments and a Railways and Harbours brigade, including two armoured trains. Provision is made for medical, engineering and other technical services, but details are not available.

## UNITED STATES

**HONOURS.**—The King has been pleased to approve the appointment of the following officers to be Honorary Knights Grand Cross of the Military Division of the Most Honourable Order of the Bath (G.C.B.), in recognition of their distinguished services to the Allied cause :—

General of the Army George C. Marshall, Chief of Staff, United States Army.

General of the Army Henry H. Arnold, Chief of Staff, United States Army Air Force.

## U.S.S.R.

**OFFICERS' CLUBS.**—The Red Army paper *Red Star* announced on 3rd September the creation of officers' clubs, exclusively for the use of Red Army officers. Hitherto officers and other ranks possessed club facilities in common.

## AIR NOTES

### GREAT BRITAIN

#### AIR COUNCIL

On 20th October, the Air Ministry announced that Marshal of the Royal Air Force Lord Portal of Hungerford would relinquish the post of Chief of the Air Staff and First and Senior Air Member of the Air Council on his retirement from the Service on 1st January, 1946.

The King has appointed Marshal of the Royal Air Force Sir Arthur Tedder to succeed him.

Lord Portal of Hungerford has been Chief of the Air Staff since October, 1940. He was raised to the peerage in the honours at the dissolution of the late Government (see "Honours and Awards.")

Air Vice-Marshal L. N. Hollinghurst, K.B.E., C.B., D.F.C., has been appointed Air Member for Supply and Organization on the Air Council, vice Air Chief Marshal Sir Christopher L. Courtney, G.B.E., K.C.B., D.S.O., and granted the acting rank of Air Marshal (14th September, 1945).

On 4th October, it was announced by the Treasury that H.M. Government had decided to establish a separate office to handle the affairs of the British element of the Control Commissions for Germany and Austria. A permanent secretary would be appointed to the new office. Sir Arthur Street has been seconded from his post as Permanent Under-Secretary of State for Air to become the Permanent Secretary of the new office. Sir William Brown has been appointed by the Secretary of State for Air to act as Permanent Under-Secretary of State for Air in Sir Arthur Street's absence.

#### APPOINTMENTS

The following appointments were announced on the dates stated :—

30th July, 1945 :—

British Air Forces of Occupation (Germany) :—

Air Vice-Marshal F. L. Hopps to be Air Officer-in-Charge of Administration.

Air Vice-Marshal C. R. Steele to be Senior Air Staff Officer.

Air Vice-Marshal A. L. Paxton to be Air Officer Commanding No. 85 Group.

Air Commodore P. E. Maitland to be Air Officer Commanding No. 2 Group, and to be Acting Air Vice-Marshal.

13th August, 1945 :—

Air Vice-Marshal S. C. Strafford to be Air Officer Commanding, R.A.F., Iraq.

Air Vice-Marshal V. E. Groom to be Air Officer-in-Charge of Administration, Flying Training Command.

Air Vice-Marshal G. S. Hodson to be Air Officer-in-Charge of Training, Bomber Command.

17th August, 1945 :—

Air Vice-Marshal S. F. Vincent to be Senior Staff Officer, Fighter Command.

27th August, 1945 :—

The King, on the recommendation of the Home Secretary, has approved the appointment of Air Vice-Marshal Sir Geoffrey Bromet as Lieutenant-Governor of the Isle of Man, in succession to Vice-Admiral Lord Granville, who was to relinquish his post on 6th September to take up his appointment as Governor of Northern Ireland.

Air Chief Marshal Sir Arthur Harris, Air Officer Commanding-in-Chief, Bomber Command, since February, 1942, will relinquish his appointment in September, and shortly afterwards retire from the R.A.F. He will be succeeded by Air Marshal Sir Norman Bottomley, Deputy Chief of the Air Staff.

Air Marshal A. Durston, Air Officer Commanding a Group in South-East Asia, will succeed Air Marshal Sir Norman Bottomley as Deputy Chief of the Air Staff.

Air Marshal Sir Charles Carr has been appointed Air Marshal Commanding Base Air Forces, South-East Asia, and took up his appointment on 22nd August. He succeeded Air Marshal L. N. Hollinghurst, who has been selected for appointment as Member of the Air Council for Supply and Organization.

Air Marshal Sir John Bradley will shortly relinquish his appointment as Deputy to the Member of the Air Council for Supply and Organization, and thereafter retire from the R.A.F. The post will then lapse.

*28th August, 1945 :—*

Air Vice-Marshal Sir Hugh W. L. Saunders has been appointed Air Marshal Commanding R.A.F., Burma, with the Acting rank of Air Marshal.

*14th September, 1945 :—*

Air Vice-Marshal J. D. Breakey is to be Air Officer Commanding No. 222 Group in South-East Asia Command.

*26th September, 1945 :—*

Air Vice-Marshal R. M. Foster to be Chief of Air Division, Control Commission, Austria.

Air Vice-Marshal A. C. Stevens to be Air Officer Commanding No. 47 Group.

Air Vice-Marshal R. Ivelaw-Chapman to be Air Officer Commanding No. 38 Group.

Air Vice-Marshal R. G. Hart to be Chief Signals Officer, Allied Control Commission.

Air Commodore H. B. Russell to be Head of Disarmament Staff, British Air Forces of Occupation, and to be Acting Air Vice-Marshal.

Air Commodore T. C. Traill to be Air Officer Commanding No. 83 Group, and to be Acting Air Vice-Marshal.

*11th October, 1945 :—*

Air Chief Marshal Sir Edgar Ludlow-Hewitt has relinquished his appointment as Inspector-General of the R.A.F. and will shortly retire from the Service. He will be succeeded as Inspector-General by Air Marshal Sir Arthur Barratt, C-in-C., Technical Training Command.

Air Marshal Sir Ralph Sorley, Controller of Research and Development at the Ministry of Aircraft Production, has been appointed C-in-C., Technical Training Command.

Air Marshal W. A. Coryton will succeed Air Marshal Sir Ralph Sorley as Controller of Research and Development at the Ministry of Aircraft Production.

**COLLEGE OF AERONAUTICS.**—It was announced on 9th August that the following have been appointed to be the Board of Governors of the College of Aeronautics for post-graduate instruction in aeronautical science and engineering, which, as announced in the House of Commons in October, 1944, is being created in accordance with the recommendations of the Committee presided over by Sir Roy Fedden, whose report was issued last year :—

**Chairman.**—Air Chief Marshal Sir Edgar Ludlow-Hewitt.

**Members.**—Dr. W. Abbott, Mr. H. Burroughes, Sir Roy Fedden, Mr. J. Ferguson, Brigadier-General Sir Harold Hartley, F.R.S., Sir William Hildred, Sir Melvill Jones,

F.R.S., Dr. E. B. Moullin, Mr. J. D. North, Sir Frederick Handley Page, Mr. E. F. Relf, F.R.S., Dr. H. Roxbee-Cox, Lord Selkirk, Air Marshal Sir Ralph Sorley, Sir William Stanier, F.R.S., Rear-Admiral T. H. Troubridge, and Mr. W. E. F. Ward.

## PROMOTIONS

*Air Chief Marshal to Marshal of the Royal Air Force :—*

Sir Arthur W. Tedder, G.C.B.

This promotion, announced in the *London Gazette* on 11th September, followed the relinquishment by Sir Arthur Tedder of the post of Deputy Supreme Commander to General Eisenhower on the dissolution of Supreme Headquarters, Allied Expeditionary Force, in July. Since then, Sir Arthur Tedder has been attached to the Air Ministry for special duties. He visited South Africa in September as the guest of Field-Marshal Smuts.

*Grant of Acting Rank :—**Air Marshal as Air Chief Marshal :—*

Sir Keith R. Park, K.C.B., K.B.E., M.C., D.F.C. (1st August).

*Air Vice-Marshal as Air Marshal :—*

Sir Hugh W. L. Saunders, K.B.E., C.B., M.C., D.F.C., M.M. (1st August).

*Air Commodores as Air Vice-Marshals :—*

M. L. Taylor, C.B.E., A.F.C. (27th June).

P. E. Maitland, C.B., M.V.O., A.F.C. (8th August).

S. F. Vincent, C.B., D.F.C., A.F.C. (16th August).

H. B. Russell, D.F.C., A.F.C. (23rd July).

R. Ivelaw-Chapman, C.B.E., D.F.C., A.F.C. (1st August).

T. C. Traill, O.B.E., D.F.C. (1st September).

A. F. Lang, M.B.E., A.F.C. (Technical Branch) (1st June).

R. C. Hart, C.B.E., M.C. (Technical Branch) (16th August).

W. J. B. Curtis, C.B.E. (Equipment Branch) (17th July).

*Group Captain (Acting Air Commodore) as Air Vice-Marshal :—*

I. E. Brodie, O.B.E. (unpaid) (cancelling previous notification).

## RETIREMENTS

It was announced on 13th October that Air Marshal Sir Richard Peck, Assistant Chief of the Air Staff (General) since February, 1940, was retiring from the Service. For nearly the whole of the War he was the anonymous "Air Ministry spokesman" in talks with Press correspondents on the work of the R.A.F.

Air Vice-Marshal Sir Lionel D. D. McKean, K.B.E., C.B. (21st May, 1945).

Group Captain the Right Hon. Viscount Stansgate, D.S.O., D.F.C., has resigned his Commission in order to resume his Parliamentary duties, and retains the rank of Air Commodore.

## HONOURS AND AWARDS

## VICTORIA CROSS

It was announced on 17th August that the King had conferred the award of the Victoria Cross, in recognition of conspicuous bravery, on—

*Acting Squadron Leader Ian Willoughby Bazalgette, D.F.C., R.A.F.V.R., 635 Squadron (deceased).*

On 4th August, 1944, Squadron Leader Bazalgette was master bomber of a Pathfinder

squadron detailed to mark an important target at Trossy St. Maximin (France). His Lancaster came under heavy anti-aircraft fire; both starboard engines were put out of action and serious fires broke out in the fuselage and the starboard mainplane. The bomb aimer was badly wounded.

As the deputy master bomber had already been shot down, Squadron Leader Bazalgette knew that the success of the attack depended on himself. Despite the appalling conditions in his burning aircraft, he pressed on, marking and bombing the target accurately. The attack was successful.

After the bombs had been dropped the Lancaster dived, practically out of control. By expert airmanship and great exertion he regained control, but the port inner engine then failed, and the whole of the starboard mainplane became a mass of flames. He ordered those of his crew who were able to do so to leave by parachute, but remained at the controls to attempt the almost hopeless task of landing the crippled and blazing aircraft in a last effort to save a wounded bomb aimer and incapacitated air gunner. Taking great care to avoid a small French village, he brought the aircraft down safely. Unfortunately it then exploded, and this gallant officer and his two comrades perished.

His heroic sacrifice marked the climax of a long career of operations against the enemy, during which he always chose the more dangerous and exacting roles.

#### RESIGNATION HONOURS

The following was among the honours and awards approved by the King, and announced on 14th August, on the resignation of Mr. Churchill:—

**Baron.**—Marshal of the Royal Air Force Sir Charles F. A. Portal, Chief of the Air Staff since 1940.

In the *London Gazette* on 12th October, it was announced that Sir Charles had taken the title of Baron Portal of Hungerford, of Hungerford in the County of Berks (dated 17th September).

#### PERSONNEL

**OVERSEA TOUR.**—On 24th August, the Air Ministry announced that from 1st December, 1945, the overseas tour for single men in the R.A.F. would be reduced from four years to three years six months. The previous R.A.F. overseas tour was four years for single men and three years for married men. The operation of the demobilization scheme was not affected by this revised arrangement.

**M.A.A.F. DISBANDED.**—On 30th July, Field-Marshal Sir Harold Alexander, Supreme Allied Commander, Mediterranean, announced the dissolution of the Mediterranean Allied Air Forces. British forces reverted to the R.A.F. Mediterranean Command under Air Marshal Sir Guy Garrod.

**FUTURE OF A.A.F.**—With the end of the War and reduction in the front line strength of the R.A.F., the decision was announced to withdraw from active service all the Auxiliary Air Force Squadrons which for over five years had operated with distinction in many parts of the world. They will revert to their auxiliary status and renew their former affiliations with their parent cities or counties. As after the War the Auxiliary Squadrons form an even more vital element of the Air Force organization for the defence of the country, it is desirable that they should begin again to build themselves up with local members as soon as possible.

#### WAR STATISTICS

The Ministry of Aircraft Production announced on 31st August that during The War the total United Kingdom production of complete aircraft was 125,500. The figure

included as many as 220 different mark numbers produced from many different kinds of operations. There were, for example, 29 versions of the Spitfire. This type represented the biggest number (21,000, including Seafires for the Navy). Other totals were 14,000 Hurricanes (including 1,500 built in Canada); 11,391 Wellingtons; 10,000 Ansons; 9,000 Lancasters, and 6,000 each of Halifaxes and Mosquitos. Output of complete aircraft in the United Kingdom rose from an average of 730 a month in the last four months of 1939 to 2,435 a month in 1944.

Between 1939 and 1945, 24 piloted and 278 non-piloted aircraft were destroyed by the R.A.F. Balloon Command.

The Air/Sea Rescue Service saved 5,721 R.A.F. and American aircrew members in the waters around Great Britain during the war against Germany; 1,998 were Americans. Oversea A/S.R. units rescued at least 3,200 aircrew, and in areas other than the seas around Britain the Service saved 4,665 soldiers, sailors and civilians.

Air Chief Marshal Sir Arthur Harris, in a statement at Salisbury, Rhodesia, on 23rd September, said that, although the exact figure was not known, it was estimated that nearly 50,000 men of British bomber crews, out of a total of 110,000 engaged on heavy bomber operations, were killed during the War. The fact that the combined losses of the British and Canadian Armies from D-Day to the end of the war were fewer than 50,000 showed what these R.A.F. men had endured; the casualty rate "was greater than anything which I can find in history among a similar body of men over a similar period" said Sir Arthur.

#### RECORD ATLANTIC FLIGHTS

The fastest recorded East to West crossing of the Atlantic was made on 6th September by an R.A.F. Mosquito, which flew from St. Mawgan, near Newquay, Cornwall, to Torbay, Newfoundland, in seven hours, two minutes. The Mosquito was on a duty flight and was not seeking records; it was a photographic reconnaissance aircraft of R.A.F. Coastal Command. The distance covered was 2,160 nautical miles. The pilot was Wing Commander J. R. H. Merifield, D.S.O., D.F.C., and the navigator Flight Lieutenant J. H. Spires, D.F.C., D.F.M. The same aircraft with the same officers returned from Newfoundland to Cornwall on the 23rd October. The flight, which was a record for a West to East trans-Atlantic crossing, took five hours, ten minutes. The aircraft flew at 30,000 feet and there was a following wind of 70 miles an hour. The average speed was in excess of 445 miles an hour.

#### BATTLE OF BRITAIN ANNIVERSARY

The first post-War anniversary of the greatest day in the Battle of Britain (15th September, 1940, when 185 German aircraft were destroyed) was commemorated on 15th September. Nearly a hundred R.A.F. stations were opened to the public for the first time since the War. German aircraft were exhibited in Hyde Park and Trafalgar Square. An impressive formation flight was made over London by 25 squadrons of the R.A.F., headed by Group Captain Douglas Bader, the legless pilot, recently returned from a prisoner of war camp in Germany. Next day (Sunday) special services of thanksgiving were held in Westminster Abbey and many churches and chapels throughout the country.

#### DOMINIONS AND COLONIES

##### AUSTRALIA

**RECRUITING STOPPED.**—On 13th August, the Commonwealth Air Minister, announced the cessation of recruiting for the Royal Australian Air Force and the Australian W.A.A.F.

**AIRCRAFT PRODUCTION.**—In handing over to the R.A.A.F. the 1,000th aircraft produced by the Beaufort Division of his Department, the Minister of Aircraft Production said that the production of 300 Beaufighters and 700 Beauforts was a splendid achievement for the common effort of the United Nations. Since the outbreak of war, Australia

had built eight different types of aircraft. Plans to ensure the permanence of the aircraft industry after the War included the manufacture of Tudor transport aircraft.

### CANADA

**INTERIM AIR FORCE.**—On 19th September, the Minister of National Defence for Air announced that an interim Canadian Air Force is being organized, pending the establishment of the R.C.A.F. on a permanent peace-time basis. Airmen now serving and those who have been transferred to the R.C.A.F. Reserve will be eligible for employment in the interim force, and applicants on the Active List will not be demobilized if they can be usefully employed in their present rank.

## REVIEWS OF BOOKS

### GENERAL

**Who Dies Fighting.** By Angus Rose. (Jonathan Cape, London.) 8s. 6d.

This is a first-hand, human and most readable account of the circumstances and conditions which led up to and included the fall of Singapore. Written temperately and with many humorous touches, it is nevertheless, in effect, the indictment of a professional soldier of much that was rotten in the States of Malay and especially in the fortress capital.

Fundamentally, the military weakness of Singapore was inherent in the two fallacies that if it were attacked the attack would almost certainly come by sea; and that if, which was regarded as extremely improbable, any assault was made from the mainland, it could be met by a local air force. In practice the coast defences proved almost valueless and the air force entirely inadequate.

It is interesting to compare the inglorious and futile defence of Singapore with the heroic and successful survival of Malta; why did the one collapse and the other hold? Malta, for long, had only a negligible air force, but it had the immeasurable advantage of the strategical security provided by sea power. The whole conception of holding Singapore was based on the fallacious notion that local security could be substituted for sea power. We had so weakened our fleet in the Far East while failing to build up our air force, that Japan was free to run amok. Only after years of losses and sacrifices have we, with major help from the United States, recovered sea power—and Singapore.

This little volume is one of the early arrivals of a whole library of books, yet to be written, showing how weakness and parsimony in our defence policy during the between-war years brought the whole Empire within measurable distance of disintegration. How often could it be said of how many situations in the early days of the War, as the author writes—"Our Commands and Staffs worked hard enough, but . . . their work was almost entirely misdirected, and this I attribute to our whole pre-war system which was academic as opposed to practical, and the reason it was academic was because the British taxpayer would not produce the necessary monetary votes to make it anything else." But the British taxpayer is influenced very largely by those of his fellow countrymen who have the gift of the gab and the means for broadcasting their loquacity—the political leaders. Therefore, again, Major Rose seems justified in his comment "Every soldier is familiar with the Duke of Wellington's dictum that there are no bad men, but only bad officers. I have often wondered why the Duke, being a statesman, did not go a step further and add that there are no bad officers, only bad politicians."

**By Air to Battle.** (H.M. Stationery Office.) 1s.

Prepared for the Air Ministry by the Ministry of Information, this story of the British 1st and 6th Airborne Divisions is written in popular style and should appeal to the general public. Full credit is given to the leaders for their skill in overcoming difficulties and for their thorough training of our airborne formations. A great number of individuals of every rank are mentioned by name, and their exploits are recorded in glowing terms.

There is much information in the book that has not been published hitherto. For instance, out of 108 gliders that went in to the attack on Sicily, 50 fell into the sea and 25 more were never seen or heard of again. At Arnhem the 1st Airborne Division, which had started 10,095 strong, lost 7,605 officers and men in killed, wounded and missing.

The Battle of Arnhem is described in great detail. The final airborne attack at the crossing of the Rhine on 24th March, 1945, however, is merely summarized in outline, for "to describe the operations in detail was not possible at the moment of writing."

**Psychology for the Armed Services.** Edited by Edwin G. Boring. (Washington, *The Infantry Journal*.) Price in the United States, \$3.00.

To many the term "psychology" is somewhat suspect. It is thought to savour of egotistical and morbid introspection and should therefore be taboo. But if psychology is the study of the peculiarities of the human mind and of the means whereby to influence that human mind in right directions, then in other words it is the study of human nature and how to deal with it; and a knowledge of human nature is a primary aid to the art of leadership.

The American book under notice here has been prepared by a Committee of the National Defence Council. It deals with its subject in most thorough fashion and is well worthy of study by any officer.

#### NAVAL

**Brassey's Naval Annual, 1945.** Edited by Rear-Admiral H. G. Thursfield. (William Clowes & Sons, London.) 30s.

So much has occurred since the end of 1944, which is the period covered by the 56th year of Brassey, that some of the contents of this number must be regarded as already out of date; nevertheless it certainly merits a place on the shelves of every student of naval warfare, for many of the Chapters will be indispensable for the future study of the War. It also suffers from the fact that the time required for its production prevented advantage being taken of the lifting of the Censorship; but, within the limitations imposed, the Editor and the contributors of the various Chapters have done remarkably well and have fully maintained the reputation of the premier naval publication of its kind.

The four war Chapters which demand the greatest attention from the reader, apart from the valuable Naval Chronicle compiled this year by Captain E. Altham, R.N., are two dealing with the War in the Pacific from different angles written by Lieutenant Bernard Brodie, U.S.N., and Air-Commodore L. MacLean, respectively; one on the Strategy and Propaganda of German Naval Force, by Dr. H. Rosinski; and an anonymous one on Carrier Operations. Admiral Sir William James contributes a short Chapter on "The Navy after the War"; one hopes to see the policy which he advocates carried into effect.

Although some attempt has been made to effect improvements in the reference section, and particularly the descriptive tables of British and foreign men-of-war, this inevitably remains the weakest section of the book but will presumably be given a complete revision now that conditions permit it to be done for the next edition. The illustrations are excellent, both in choice and reproduction.

#### MILITARY

**Arms and Armament: AN HISTORICAL SURVEY OF THE WEAPONS OF THE BRITISH ARMY.** By Charles Foulkes, C.B., O.B.E. (George G. Harrap & Co., Ltd.) 15s.

The author's intention, as stated in his Preface, is to show briefly the development of certain weapons and equipment "up to the date when the mechanical details are so complex that they can only be studied in highly technical works of reference." The book is in the nature of a collection of notes "to record entries having some historical interest from documents and privately printed works which are not accessible to the ordinary student. The large proportion of these notes is reprinted from the *Journal of the Society for Army Historical Research*."

As Field-Marshal Sir Claud Jacob writes in his Foreword: "A great deal could be said on this subject of arms and armament, but the reader will find that the author has compressed a great deal of research into a readable volume."

The book is well produced and provided with numerous and excellent diagrams and illustrations. There is a good Index.

## ADDITIONS TO THE LIBRARY

### GENERAL

- LONG ROAD TO LEROS. By L. Marsland Gander. 8vo. (MacDonald, 1945.) 10s. 6d.  
Experiences of a War Correspondent.
- PSYCHOLOGY FOR THE ARMED FORCES. Prepared by a Committee of the U.S. National Research Council and Edited by Edwin G. Boring of Harvard University. 8vo. (Infantry Journal, 1945.) \$3.00. Presented.
- MATHEMATICS FOR THE MILLION. By Lancelot Hogben. 8vo. (Allen & Unwin, 1945 Edition.) 12s. 6d.
- WINSTON CHURCHILL, GANZ "PRIVAT." von Walter Persich. 8vo. (Schaffer, Berlin, 1942.) Presented. Typical German "Gott strafe England" Propaganda.
- ENGLAND OHNE MASKE. von Wolfgang Loeff. 8vo. (Eisentraut, Leipzig, 1939.) Presented. Same theme as the above.
- HINTER DEN KULISSEN. von Herbert Kranz. 8vo. (Zeil, Frankfurt-am-Main, 1941.) Presented. German propaganda, mainly against France.
- DER KREIG 1939/41 IN KARTEN. (KROIT & Hirth, München, 1942.) Presented. Booklet of maps in the Horrabin style.
- BRITISCHE BILDER. von A. Paul Weber. (Nibelungen, Berlin, 1941.) Presented. Book of somewhat suggestive, but beautifully executed cartoons directed against England.
- THE ANNUAL REGISTER. Vol. 186 for 1944. Edited by M. Epstein. (Longmans 1945.) 42s.
- INTERNATIONAL SEA TRANSPORT. By Brigadier-General Sir Osborne Mance. 8vo. (Oxford University Press, 1945.) 12s. 6d. Presented.
- THE EPIC OF TARAWA. By W. Richardson. 8vo. (Odhams Press, 1945.) 3s. 9d.
- THE LEGAL PROFESSION. By C. G. L. du Cann. Brochure by Robert Ross & Co., Ltd., 1945.) 2s. 6d. Presented.
- SECURITY IN THE PACIFIC. (A Preliminary Report of the Ninth Conference of the Pacific Relations, Hot Springs, Va., 1945.) 6s. 6d.
- THE FATE OF JAPAN. By Simon Harcourt-Smith. (Pamphlet by Claud Morris Books, Ltd., 1945.) 1s. 3d.
- IT'S YOUR EMPIRE. By Alexander Campbell. 8vo. (Gollancz, 1945.) 7s. 6d.
- LICHFIELD CATHEDRAL.—A HISTORY OF THE NAVAL AND MILITARY MONUMENTS, MEMORIALS AND COLOURS. By Lt.-Colonel M. B. Savage. Presented by the Author.
- FRANZ RITTER VON EPP. von Josef H. Krumbach. 8vo. (Rochf, München, 1940.) This was Seyss-Inquart's copy and was presented by Prince Bernhard of the Netherlands.
- ECLIPSE. By Alan Moorehead. 8vo. (Hamish Hamilton, 1945.) 12s. 6d.
- THE WAITING YEAR. By Richard Dimbleby. 8vo. (Hodder & Stoughton, 1945.) 10s. 6d.
- GOVERNMENT CONTROL IN WAR. By Lord Hankey. 8vo. (Cambridge University Press, 1945.) 4s. 6d.
- THE ATOMIC BOMB—WHAT OF THE FUTURE? By R. E. D. Clark. (Pamphlet by Paternoster Press). 9d.
- WATER UNDER THE BRIDGES. By Sir Nevile Henderson. 8vo. (Hodder & Stoughton, 1945.) 12s. 6d.

GREEN ARMOUR. By Osmar White. 8vo. (Allen & Unwin, 1945.) Presented. The Reconquest of New Guinea, by an Australian War Correspondent.

CHINA UNDER THE EMPRESS DOWAGER. By J. O. P. Bland and E. Backhouse. 8vo. (Heinemann, 1910.) Presented.

### NAVAL

THE ART OF WAR—TWENTIETH CENTURY VERSION. By Admiral Sir R. P. Erle-Drax. (Pamphlet published March, 1943.) Presented.

THE U.S. MARINES ON IWO JIMA. By Five Official Marine Combat Writers. (Booklet by the Infantry Journal, 1945.) 25c. Presented.

THE SILVER PHANTOM.—H.M.S. "AURORA." By Her Company. 8vo. (Muller, 1945.) 5s.

MERCHANT SHIPS, 1944. Compiled by E. C. Talbot-Booth and E. B. R. Sargent. (Sampson Low, 1945.) 63s.

LANDLUBBER'S LOG. By Norman Lee. 8vo. (Quality Press, 1945.) 6s. Story of the Merchant Navy by a well-known playwright.

LIFE OF CAPTAIN SIR DAVID WILSON-BARKER, Bt., R.N.R. By the Reverend George Seaver. (One of Six Copies of a bound typescript, 1942.) Presented.

LOG OF THE PROCEEDINGS OF H.M.S. "DEE" COMMENCING JUNE 20TH, 1832, until NOVEMBER 8TH, 1833. (Kept by Midshipman S. Hyman.) Presented.

BRASSEY'S NAVAL ANNUAL, 1945. Edited by Rear-Admiral H. G. Thursfield. (William Clowes.) 30s. Presented.

MARINE GUNNER. By Patrick Mee. 8vo. (Cape, 1935.) Presented. Reminiscences of the lower deck in the early years of the XXth Century.

### MILITARY

\* THE AUSTRALIAN ARMY AT WAR, 1939-44. (Pamphlet by Australian Army Staff.) Presented.

\* RECONQUEST. (Pamphlet by Australian Army Staff on the New Guinea Campaign, 1943-44.) Presented.

\* THE JAP WAS THRASHED. (Pamphlet by the Australian Army Staff on the Milne Bay, Owen Stanleys, Buna-Gona and Sanananda Operations, 1942-43.) Presented.

\* JUNGLE VICTORY. (Pamphlet by the Australian Army Staff on the New Guinea Operations, January-September, 1943.) Presented.

\* SALAMAUA SIEGE. (Pamphlet by Australian Army Staff.) Presented.

MILITARY ORIGINS. By Brigadier C. T. TOMES. (Pamphlet by William Stevens, Ltd., York.) 1s. Interesting Army Customs.

OFFICIAL OPERATIONS ON THE NORTH-WEST FRONTIER OF INDIA, 1920-35. Parts. I, II and III. (Government of India Press, Delhi, 1945.) Rs. 9, annas 8, or 15s. 6d. Presented.

GENERALS AND GENERALSHIP. By General Sir Archibald Wavell. (Pamphlet containing lectures delivered in 1939, and reprinted by *The Times* Newspaper, 1941.) 6d.

TINNED SOLDIER. By Alec Dixon. 8vo. (Cape, 2nd Impression.) 7s. 6d. Story of the Tank Corps in the "Good Old Days."

ROAD TO ROME. By Christopher Buckley. 8vo. (Hodder & Stoughton, 1945.) 7s. 6d. Conquest of Sicily and Italy, 1943-44.

BY AIR TO BATTLE. (Pamphlet by M.O.I. on the 1st and 6th Airborne Divisions, and published by His Majesty's Stationery Office, 1945.) 1s. Presented.

- AN INFANTRY OFFICER WITH THE 8TH ARMY. By Major H. P. Samwell. 8vo. (Blackwoods, 1945.) 7s. 6d.
- THE ROYAL ARMOURD CORPS. (Official Pamphlet prepared for War Office and published by His Majesty's Stationery Office, 1945.) 1s.
- THE BATTLE OF BRUNANBURH. By Alistair Campbell. 8vo. (Heinemann, 1938.) 10s. 6d.
- WHO DIES FIGHTING. By Angus Rose. 8vo. (Cape, 1945.) 8s. 6d. Presented. The story of the Malayan Retreat and the Battle of Singapore by an Officer of the Argyll and Sutherland Highlanders.
- A TROOPER OF THE "TINS." By R. A. Lloyd. 8vo. (Hurst & Blackett, 1938.) Presented. A book of Reminiscences of the War of 1914-18.
- FIELD GUNS IN FRANCE. By Neil Fraser-Tytler. 8vo. (Hutchinson, 1922.) Presented. A book of Reminiscences of the War of 1914-18.
- FIVE YEARS HARD. By Brigadier-General F. P. Crozier. 8vo. (Cape, 1932.) Presented. Reminiscences of a Regimental Officer in the Western Sudan; early 20th Century.
- THEY LEFT THE BACKDOOR OPEN. By Lionel Shapiro. 8vo. (Jarrolds, 1945.) 12s. 6d. Chronicle of the Campaign in Sicily and Italy by a Canadian War Correspondent.
- STANDING ORDERS OF THE ELEVENTH REGIMENT OF LIGHT DRAGOONS. (M. Virtue, Dorchester, 1799.) Presented.

## AIR

- TRIUMPH OVER TUNISIA. By T. H. Wisdom. 8vo. (Allen & Unwin, 1944.) 8s. 6d.
- SOARING FLIGHT. By Terence Horsley. 8vo. (Eyre & Spottiswoode, 1945.) 16s.
- GUIDE TO THE PILOT'S "A" LICENCE. By W. J. D. Allan. 8vo. (Allen & Unwin, 1945.) 7s. 6d.
- THE BOYS OF COASTAL COMMAND. By Frank Tilsey. 8vo. (Cassell, 1944.) 5s. Presented.
- THE WINGS OF WARFARE. By Geoffrey Block. 8vo. (Hutchinson, 1945.) 15s.
- POLISH WINGS OVER BRITAIN. By L. G. Marsh. (Pamphlet by MaxLove Publicity Co.) 3s. 6d.
- SECOND REPORT OF THE COMMANDING GENERAL OF THE U.S. ARMY AIR FORCES TO THE SECRETARY OF WAR. (Official Pamphlet reprinted by His Majesty's Stationery Office, 1945.) 1s. 6d.

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\* These publications have been placed in the Smoking Room, but will be sent out on application.

## SPECIAL GENERAL MEETING

AT 3 P.M., TUESDAY, 2ND OCTOBER, 1945

AIR CHIEF MARSHAL SIR ROBERT BROOKE-POPHAM, G.C.V.O., K.C.B.,  
C.M.G., D.S.O., A.F.C., in the Chair

THE CHAIRMAN: This is a Special General Meeting called by the Council for a particular purpose and I will ask the Secretary to read the Notice convening it.

THE SECRETARY read the Notice convening the Meeting, as notified in the JOURNAL, and published in *The Times* of 18th September, 1945.

THE CHAIRMAN: Amendments to our Bye-laws have to be made by a General Meeting of Members of the Institution, and this Special General Meeting has been called to put a resolution amending the Bye-Law relating to Life Subscriptions, paid over a number of years, so as to enable the Institution to recover Income Tax and so benefit to that extent. The details have been published in the Secretary's Notes in the JOURNAL for August of this year and the proposal is, in effect, to make an addition to the present Bye-law, to read as follows:—

“Alternatively a Member can sign a Deed of Covenant to pay £3 os. od. per annum for seven years (thereby enabling the Institution to benefit under the Income Tax Act, 1918, Section 37, by recovery of Tax).

“In each case the first payment is due on joining the Institution; instalments on 1st January of each succeeding year.”

If there are no comments I will put it to the meeting that Chapter II, par. 6, of the Bye-laws be so amended.

MAJOR P. D. CLENDENIN: I second.

The Resolution was then put to the Meeting and carried unanimously.

THE CHAIRMAN: That concludes the business of the Meeting.

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SPECIAL GENERAL MEETING

FOR THE PURPOSE OF AMENDING THE BY-LAWS OF THE  
SOCIETY OF THE FRIENDS OF THE AFRICAN  
AND THE AFRICAN SOCIETY

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## DIARY OF THE WAR, 1945

1st July.—After an Allied naval and air bombardment Australian troops landed practically unopposed near Balikpapan (South-East Borneo).

2nd July.—The U.S. Navy Department announced that H.M. submarine "Trenchant," under U.S. Pacific command, had sunk by daylight a 10,000-ton Japanese cruiser in the South-West Pacific. American submarines had sunk ten more Japanese ships.

On Bougainville (Solomon islands) Australian troops secured the Mivo river line.

Nearly 600 U.S. heavy bombers dropped 4,000 tons of incendiaries on the Kure naval base and other targets in western Kyushu (Japan).

3rd July.—American troops began to take over the U.S. sector of occupation in Berlin.

Australian forces captured most of the town of Balikpapan (Borneo) and occupied the Sepinggan airstrip.

Nearly 500 U.S. heavy bombers attacked industrial targets on the islands of Honshu and Shikoku (Japan). Some 3,000 tons of incendiaries were used.

4th July.—British troops began to enter their sector in Berlin. General Bradley formally took over the U.S. sector from the Russians.

In Burma on this day and the previous night Japanese attacks upon British posts in the Sittang river bend North-East of Pegu resulted in heavy casualties to the enemy.

Australian troops completed the capture of Balikpapan and secured Manggar airstrip on the coast of the Macassar Strait. In the Brunei region further progress was made.

General MacArthur announced the liberation of the whole of the Philippine islands.

The U.S. Navy Department announced that two of the warships sunk by Japanese air attack upon the fleet off Okinawa in June were the destroyers "William D. Porter" and "Twiggs."

It was reported that U.S. medium bombers had destroyed a sugar alcohol plant on Formosa.

U.S. naval units attacked Korea for the first time. Much damage was done to shore installations; a Japanese submarine chaser was sunk; and off the China coast other vessels were sunk or damaged.

5th July.—Great Britain and the U.S.A. recognized the new Polish Provisional Government of National Unity.

Mr. John Curtin, Prime Minister of Australia, died.

On this and the previous day U.S. fighters from Iwo Jima attacked airfields in the Tokyo area, a total of 48 enemy aircraft being destroyed or damaged.

The U.S. Navy Department announced that the submarine "Trigger" must be presumed lost.

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6th July.—The British took formal possession of their sector of occupation in Berlin.

The War Office announced the appointment of Lieut.-General Sir Richard McCreery to be G.O.C.-in-C. British Forces of Occupation in Austria.

7th July.—The French Government decided to hand over the "troupes speciales," recruited locally in the Levant, to the Syrian and Lebanese Governments.

South-East Asia Command announced that fighting continued in the bend of the Sittang river North-East of Pegu; the R.A.F. had made successful attacks upon the enemy in the Mokpalin area.

After a fresh landing West of Balikpapan (Borneo) Australian troops made further progress along the coast.

For the third successive day fighters from Okinawa swept the eastern and western coasts of Kyushu.

8th July.—Canada recognized the new Polish Government.

The Commander of the British troops in Crete announced that the island was now cleared of German troops except for a few technicians employed on special duties.

It was officially announced from Guam (U.S. Headquarters) that in the recent attacks on Sakishima three British aircraft-carriers—H.M. ships "Indefatigable" and "Victorious" and one other—had suffered minor damage from Japanese "suicide" aircraft; and one of H.M. destroyers had been put out of action. Some 140 Japanese aircraft had been damaged or destroyed.

U.S. fighters from Okinawa again attacked Kyushu. Other aircraft bombed airfields in Formosa.

9th July.—General MacArthur announced that Dutch troops had made two landings on the northern shore of Balikpapan Bay (Borneo).

10th July.—H.M. trawler "Kurd" was sunk by a mine off the Lizard.

General MacArthur announced that another Australian landing had been made on the western shore of Balikpapan Bay (Borneo).

Some 2,000 U.S. aircraft attacked objectives throughout Japan. From bases on Iwo Jima and Okinawa targets on Kyushu and Shikoku were bombed, heavy bombers from the Marianas striking at the industrial cities. Airfields and factories round Tokyo were attacked by carrier-borne aircraft, 342 Japanese aircraft being reported as destroyed or damaged on the ground.

11th July.—South-East Asia Command reported no cessation of the fighting in Burma on the Sittang river bend; a Japanese attack along the Taunggyi-Mawchi road had been repulsed.

The R.A.F. bombed Bangkok railway stations and made a successful attack upon the Rajburi railway bridge, West of Bangkok.

12th July.—The British and Americans actually assumed the military government of their zones in Berlin, the problem of feeding the civilian population having been settled with the Russian authorities.

Lord Louis Mountbatten, Commander-in-Chief South-East Asia, visited General MacArthur at Manila for a conference which lasted three days.

U.S. aircraft bombed Kanora, the Japanese naval base on Kyushu; a force of over 500 U.S. heavy bombers used 3,000 tons of incendiaries and high explosive in attacks upon four objectives in Kyushu and Honshu.

Mr. J. B. Chifley was adopted as Prime Minister of Australia, succeeding Mr. Forde who had been acting since the death of Mr. Curtin (see 5th July).

13th July.—South-East Asia Command announced that sustained mine-sweeping operations in the Malacca Strait between 5th-10th July had been undisturbed by the enemy. A combined air and naval attack had been carried out against radar installations, airfields and batteries on islands in the Nicobar group. Our carrier-borne aircraft had attacked airfields on North-West Sumatra. H.M. ships engaged included the cruiser "Nigeria," the carriers "Ameer" and "Emperor," the destroyer "Roebuck," and the Sixth Mine-Sweeping Flotilla.

General MacArthur announced that Japanese resistance had collapsed North-East of Manggar aerodrome in the Macassar Strait coastal belt of Borneo.

Australian forces completed the capture of the mountains overlooking the Wewak coastal plain in New Guinea.

14th July.—Lord Wavell, Viceroy of India, announced that the Simla Conference (see 25th June) had failed.

The port of Kamaishi (Japan), an iron and steel producing centre, was heavily bombarded by a U.S. fleet. U.S. carrier-borne aircraft and heavy bombers in great strength attacked Hokkaido island and northern Honshu.

At midnight 14th/15th July the Italian Government declared war on Japan.

15th July.—At one minute past midnight 14th/15th July Supreme Headquarters Allied Expeditionary Force (S.H.A.E.F.) came to an end.

South-East Asia Command announced that in Burma the situation on the Sittang river was improving.

General MacArthur announced that a Japanese strong-point at Mount Batochampar near Balikpapan (Borneo) had been captured by Australian forces.

U.S. fighters from Iwo Jima shot down 24 Japanese aircraft and probably destroyed 16 others in combat over the Nagoya and Osaka areas. Two fighters were lost. U.S. heavy bombers from the Marianas attacked an oil refinery on Honshu.

The naval bombardment of Japan was resumed by the U.S. fleet, the steel centre of Muroran being the chief objective. On this and the previous day 128 Japanese vessels were destroyed and 92 aircraft destroyed or damaged.

16th July.—The Potsdam Conference opened with a preliminary meeting of the Chiefs of Staff.

Chungking announced that Chinese troops had occupied Luikiangshien in Kwangsi province.

The U.S. Third Fleet and a British fleet, which included the battleship "King George V," the aircraft-carrier "Formidable," the cruisers "Newfound-

land" and "Black Prince," four destroyers and one Australian destroyer, opened fresh attacks in the region of Tokyo.

Nearly 500 U.S. heavy bombers attacked Japan, dropping 2,500 tons of incendiaries.

17th July.—The first meeting of Marshal Stalin, President Truman and Mr. Winston Churchill took place at Potsdam.

More than 200 Allied aircraft bombed Shanghai.

Chungking announced that Chinese forces had captured Moncar inside Indo-China near the Kwantung frontier.

U.S. and British naval and air forces continued their attacks on the Tokyo region. Admiral Nimitz, C-in-C. Naval Forces Pacific, announced that the "pre-invasion stage" had been reached.

18th July.—Australian forces captured without opposition the big oil centre of Samboja, North-East of Balikpapan (Borneo). In northern Borneo the Australians occupied Marudi unopposed.

On the previous night and in the early morning light naval forces (cruisers and destroyers) bombarded Nojima, 55 miles South of Tokyo.

British and American sea and air forces continued their attacks upon the Tokyo area and on north-eastern Honshu.

U.S. bombers from Okinawa attacked five airfields in the Shanghai area.

19th July.—Before dawn more than 600 U.S. heavy bombers, carrying more than 4,000 tons of incendiary and H.E. bombs, struck the cities of Choshi, Hitachi, Fukui and Okazaki on Honshu island; also an oil refinery North of Osaka.

U.S. bombers from Okinawa again attacked airfields in the Shanghai area.

21st July.—Chungking reports stated that Chinese troops were closing in on Kweilin (capital of Kwangsi province) and were attacking Japanese forces withdrawing on Canton from the port of Amoy.

U.S. aircraft from Aleutian bases bombed Matsuwa island in the Kuriles.

Light units of the U.S. fleet bombarded the South-East coast of Paramushirc (Kuriles).

The U.S. Navy Department announced that American submarines had sunk eleven more Japanese vessels in Pacific waters.

22nd July.—French troops in Syria handed over barracks to Syrian troops.

General MacArthur announced further progress in the Balikpapan area of Borneo.

U.S. heavy bombers attacked a coal plant on Honshu island (Japan).

U.S. light naval units attacked the town of Omura in Chichi Jima (Bonin islands).

23rd July.—South-East Asia Command announced that in Burma repeated Japanese attempts to break out from the Pegu Yomas eastward towards the Sittang river had met with little success. Fighting on the lower Sittang continued.

More than 1,000 fighters, bombers, and torpedo bombers from U.S. and British carriers attacked with great success Japanese warships off the naval

base of Kure in the Inland Sea. The Osaka-Nagoya area and many objectives in southern Honshu were attacked by heavy bombers, medium bombers and fighters from Okinawa and Iwo Jima.

Destroyers of the Allied fleets attacked a Japanese convoy in Sagami Bay (South of Yokohama) and sank at least two ships.

U.S. warships bombarded a seaplane base and other installations on the southernmost tip of Honshu.

More than 200 Allied aircraft attacked the Shanghai area, sinking or damaging many ships and destroying a number of aircraft on the ground.

24th July.—British troops entered Graz (capital of Styria) and took over control from the Russians.

In Burma fighting on the lower Sittang proceeded. Japanese attempts to escape eastward from the Pegu Yomas continued to result in heavy casualties.

On this and the two following days the British East Indies Fleet conducted continuous mine-sweeping operations off the West coast of Malaya, North of the Malacca Strait. Carrier-borne aircraft attacked shore installations, airfields, shipping and troops. H.M. ships engaged included the aircraft-carrier "Ameer," the destroyers "Rotherham" and "Paladin," the 7th Mine-Sweeping Flotilla, and units of the Royal Indian Navy. H.M. sweeper "Squirrel" struck a mine on 24th July and had to be sunk by our own gun-fire. Intermittent air attacks were made upon the Fleet, several Japanese aircraft being shot down.

Allied carrier-borne aircraft renewed their attacks upon Japanese warships and other objectives near Kure in the Inland Sea. Eighteen vessels were damaged and 168 enemy aircraft were reported destroyed or damaged.

U.S. heavy bombers attacked three oil refineries on Tokyo Bay.

More than 300 U.S. aircraft attacked Shanghai.

25th July.—Mr. Winston Churchill returned to London from Potsdam (see 17th July).

Lord Louis Mountbatten, Commander-in-Chief, South-East Asia arrived in London after conferring with Mr. Winston Churchill, President Truman and Marshal Stalin and with the Combined Chiefs of Staff at Potsdam.

South-East Asia Command announced an advance in the Shan States (Burma), Taunggyi being occupied.

26th July.—A proclamation to the Japanese nation issued by Mr. Churchill, President Truman and General Chiang Kai-shek called for the unconditional surrender of all Japanese armed forces, with the alternative of "prompt and utter destruction."

U.S. heavy bombers attacked industrial objectives in Kyushu, Shikoku and Honshu, 2,200 tons of fire bombs being expended.

The General Election gave the Labour Party a large majority. Mr. Churchill resigned and **Mr. Attlee proceeded to form a Labour Government.**

27th July.—At dawn Allied carrier-borne aircraft renewed their attacks upon the Inland Sea area.

U.S. heavy bombers dropped leaflets on eleven Japanese towns, warning them of impending air attack.

Japanese radio announcements stated that the Government would ignore the Allied summons to surrender (see 26th July).

28th July.—Mr. Attlee, British Prime Minister, and Mr. E. Bevin, Foreign Secretary, arrived in Potsdam where the Three-Power Conference was resumed.

At dawn more than 550 U.S. heavy bombers left the Marianas to carry out incendiary attacks upon the Japanese towns of Ogaki, Ichinomita, Tsu, Aomori, Uchiyama and Uwa Jima. Shimotsu oil refinery formed a seventh objective and the total destruction was very great.

Carrier aircraft from the U.S. and British fleets again struck at objectives in the Inland Sea. Great loss was inflicted on Japanese warships and other vessels; 175 enemy aircraft were destroyed or damaged.

29th July.—The disbandment of the British Eighth Army was announced.

Carrier aircraft, to the number of 1,000, from the U.S. and British fleets attacked the Tokyo area. U.S. and British warships bombarded Hamamatsu on the southern coast of Honshu, H.M. battleship "King George V," with a destroyer escort, taking part.

On this and the previous day U.S. fighters and bombers from Okinawa attacked objectives in Kyushu and Honshu.

30th July.—Field-Marshal Sir H. Alexander announced the dissolution of the Mediterranean Allied Air Force, the British component reverting to the R.A.F. Mediterranean Command.

Carrier aircraft from the U.S. Third Fleet struck at airfields near Nagoya and shipping off the western coast of Honshu. Sweeps over southern Kyushu did much damage to shore installations.

At night destroyers of the U.S. Third Fleet entered the Suruga Gulf (southern Honshu) and bombarded the town of Shimizu.

31st July.—Laval, being expelled from Spain, fled by air from Barcelona to Austria. He landed near Linz and was taken into custody.

South-East Asia Command reported the continuation of heavy fighting West of the Sittang river; Japanese losses were very heavy.

It was announced that Field-Marshal Sir H. Alexander had been appointed Governor-General of Canada in succession to the Earl of Athlone.

The Allied naval and air offensive against the home islands of Japan proceeded systematically and with ever-increasing force. During the last three weeks of July 1,023 Japanese surface ships and 1,257 aircraft were reported to have been destroyed or damaged. The extent of the destruction of the enemy's war industries was not so easy to gauge; neither could a term be put to the fanatical endurance of the Japanese forces and the will to resist of the people as a whole.

In Burma the 10,000 Japanese troops cut off in the Pegu Yomas were being accounted for as they attempted to escape to the Sittang river. This arduous fighting in the middle of the monsoon showed signs of coming to an end. Much had been done to restore the railway communications of the liberated country, light engines having been brought in by air.

By the end of the month the Australian losses in New Guinea numbered 1,407 and in Bougainville 1,828; the Japanese casualties, nearly all killed, amounted to some 7,000 in each theatre. The end of the Bougainville operations seemed almost in sight. In Rabaul (New Guinea) the Australians were containing some 50,000 Japanese troops.

In Germany "displaced persons" (i.e., prisoners of war, people who had been doing forced labour, etc.) to the number of 3,260,000 had been sent home up to the 22nd June. The great majority of these were French or Russian. No less than 2,530,000, mostly Russian, remained to be repatriated.

By the end of the month the Aegean Sea was almost cleared of mines, the Turkish Navy having lent assistance.

The casualties of the British Commonwealth and Empire from 3rd September, 1939, to 31st May, 1945, were officially announced to be 1,427,634. These figures include the Armed Forces (1,233,796), Merchant Navy (45,315), Home Guard (1,763), and civilians in the United Kingdom (146,760).

In what is known as the Battle of the Atlantic 574 merchant ships were lost by enemy action, that is one in every 131.

It was ascertained that H.M. destroyer "Glowworm," lost in action in the North Sea on 8th May, 1940, had engaged single-handed the German heavy cruiser "Hipper" and rammed her before sinking.

1st August.—Laval arrived in Paris and was formally arrested.

South-East Asia Command announced that the closing stages had been reached in the Japanese attempt to break out from the Pegu Yomas and reach the Sittang river.

It was officially announced that U.S. aircraft had attacked communications in Korea, penetrating to within eighty miles of the Manchurian border.

U.S. heavy bombers from the Marianas, to the number of 800, dropped the record load of 6,000 tons of high explosive and incendiaries on the industrial towns of Hachioji, Toyama, Nagaoka and Mito and the petroleum installation at Kawasaki.

A U.S. battleship bombarded Japanese positions on Wake island, which was attacked also by carrier aircraft.

2nd August.—Soon after midnight, 1st/2nd August, the **Three Power Conference at Potsdam came to an end.**

A report was issued simultaneously in London, Moscow and Washington of the decisions arrived at by the Three Power Conference.

Two fleets of U.S. fighter-bombers attacked the Usaka-Kobe area of Japan.

3rd August.—It was announced from Guam (U.S. naval headquarters) that heavy bomber action had achieved a "complete shipping blockade of the Japanese homeland" by mining every harbour of consequence in Japan and those from Korea to the Soviet border.

About 100 fighter-bombers attacked the Tokyo area.

4th August.—Allied bombers destroyed or damaged seven Japanese ships off Malaya, and attacked shipyards in the Rhio islands South of Singapore.

In the first Allied air attacks upon communications at Surabaya (Java) 37 locomotives were reported destroyed.

General MacArthur announced that from midnight, 31st July/1st August he had extended his command to include all Allied forces in the Ryukyu archipelago stretching from the southernmost tip of Japan to Formosa.

The U.S. Navy Department stated that the submarine "Snook" was overdue and must be presumed lost.

5th August.—More than 400 bombers and fighters from Okinawa attacked the port of Tarmuizu in southern Kyushu.

6th August.—President Truman announced that the **first atomic bomb** had been **dropped on Hiroshima**, the Japanese base on Honshu island, sixteen hours previously. The new bomb was more powerful than 20,000 tons of T.N.T.

It was announced from Guam that Canadian troopships and aircraft had arrived in that area.

7th August.—U.S. heavy bombers from the Marianas attacked the Japanese naval arsenal at Toyakawa.

8th August.—An agreement between Great Britain, the U.S.A., the U.S.S.R. and France regarding the establishment of international military tribunals for the trial of war criminals was signed in London.

The plan under which Austria would be administered under Allied control was made public, the British, American, Russian and French zones being defined.

Chungking announced that Chinese forces had captured Kukiang island near the port of Foochow.

General MacArthur announced that heavy, medium and fighter-bombers had struck Kagoshima and Miyakonojo, railway and industrial centres in southern Kyushu.

U.S. heavy bombers attacked Yawata, an industrial centre in northern Kyushu, and munition factories North of Tokyo.

**The U.S.S.R. declared war on Japan.**

9th August.—Russian forces under the chief command of Marshal Vassilevsky crossed the Manchurian frontier. In the Maritime territory good progress was made: the rivers Amur and Ussuri were forced in the region of Khabarovsk; in the Trans-Baikal sector the fortified area of Manchuli-Dalai Nor was carried by storm. The Russian air force struck at the railway junctions of Harbin, Changchun and Kirin, and the ports of Seishin and Rashin.

The **second atomic bomb** to be used was **dropped on Nagasaki**, which was partially obliterated.

In a broadcast announcement President Truman warned Japan that, if she continued to resist, atomic bombs would be used against her centres of war industry.

Three million warning leaflets were dropped on Japan by U.S. aircraft. These leaflets called upon the Japanese people to petition the Emperor to end the war.

British and American carrier-borne aircraft attacked shipping, airfields and other targets in northern Honshu.

Battleships, cruisers and destroyers bombarded industrial and military targets at Kamaishi on the North-East coast of Honshu.

10th August.—In Manchuria the Russians captured by storm in the Maritime territory the centres of Pogradichnaya, Tuguin and Sanchiakou and, on the Chinese Eastern Railway, took Hopei and other stations: South-West and South of Khabarovsk towns on the southern bank of the Amur and on the western bank of the Ussuri were secured: more progress was made in the Blagoveshchensk area beyond the Amur river; Hailar and Argun in the Trans-Baikal sector were captured. Air attacks upon the Manchurian railway junctions continued. Russian aircraft and ships of the Pacific Fleet on this and the previous day struck at Japanese transports in the ports of Seishin, Rashin and Yukki, sinking eleven vessels.

More than 500 U.S. bombers and fighters attacked Kumamoto, a major military supply base in Japan.

A broadcast from Tokyo announced that the Japanese Government was ready to accept the terms of the Allied ultimatum of 26th July "with the understanding that the said declaration does not comprise any demand which prejudices the prerogative of the Emperor." The British and Soviet Ministers in Stockholm received a communication to the foregoing effect from the Japanese Legation. The U.S.A. and China received similar communications through the Swiss Foreign Office.

The U.S. Navy Department announced that American submarines had sunk thirteen more enemy vessels, including a light cruiser, in Far Eastern waters; also that the destroyer-escort vessel "Underhill" had been lost in the Philippines.

11th August.—In Manchuria the Russians captured many towns in the Maritime territory; in the Khabarovsk sector the river port of Fuching on the Sungari was taken; fresh crossings of the Amur were made South-West of Blagoveshchensk; the advance in the Trans-Baikal region continued through the Khingan mountains.

Allied aircraft in day and night operations attacked air bases and railways in Formosa, harbour installations near Shanghai, and vessels near Hong Kong. Australian fighters swept the Borneo coast.

On this and the previous day Allied naval air forces attacked targets in Kyushu, Honshu and the northern Ryukyus. Fifty-one Japanese ships were sunk or damaged.

A Japanese aircraft hit and damaged with a torpedo a "major unit" of the U.S. fleet off Okinawa.

The Four Powers replied to Japan's offer of the previous day, stipulating that from the moment of surrender the Emperor's authority must be subject to the will of the Allied Supreme Commander.

The U.S. Navy Department announced the loss of the destroyer "Callaghan" and the submarine "Bonefish."

12th August.—South-East Asia Command reported stubborn fighting in the vicinity of the lower Sittang where, up to date, the Japanese casualties amounted to 11,500.

In the Maritime territory of Manchuria the Russian forces captured the towns of Muchang and Kunchung. South-West of Khabarovsk the advance, in conjunction with the Amur flotilla, reached many points beyond the river. Troops of the Trans-Baikal command advancing from Hailar on Harbin entered Yakoshin. Ships and landing parties of the Pacific Fleet captured the ports of Yukki and Rashin in northern Korea.

Allied aircraft attacked the islands of Kyushu and Shikoki, striking at airfields, railway communications, and industrial centres. A special force practically destroyed Miyazaki.

13th August.—The formal transfer of part of the British zone of control to the French took place in Berlin.

Reports from Chungking stated that Japanese troops in the province of Chekiang had ceased fighting.

The Russian advance in Manchuria made good progress in the East and between the Ussuri and the Amur rivers. In the Trans-Baikal sector the town of Halun-Argan was captured, and passes of the Khingan mountains were forced; the advance along the railway towards Harbin continued.

Sixteen Japanese aircraft were shot down in combat near Meijo (West coast of Korea) by U.S. aircraft of which one was lost.

14th August.—In Manchuria the Russian advance along the Pogramichnaya-Harbin railway forced the Mutan Kiang river and captured Mudantsian. Good progress was made on both banks of the Sungari river. East of the Khingan range troops of the Trans-Baikal sector captured many places, including Taonan, in a rapid advance. On Sakhalin island the Japanese frontier defences were broken and a deep penetration made. By an attack from the sea the port of Seishin was captured.

A force of over 400 U.S. heavy bombers attacked railway yards near Hiroshima, shipping at Kure naval base, Hikari naval base and Osaka arsenal. Fighter aircraft struck at airfields near Osaka.

The U.S. Navy Department announced the loss by enemy action of the heavy cruiser "Indianapolis."

The U.S.S.R and the Chinese Republic signed a Treaty of Alliance and Friendship.

15th August.—Marshal Pétain was sentenced to death on being found guilty of the charge of treason; but in view of his great age the Supreme Court recommended that the sentence should not be carried out.

At midnight, 14th/15th August it was announced in London—and simultaneously in Moscow and Washington—that Japan had surrendered. General MacArthur was named Supreme Allied Commander

to receive the surrender. The Allied forces were ordered to suspend operations.

General MacArthur sent an order to the Japanese to cease hostilities immediately and to send a representative to U.S. Headquarters at Manila to receive instructions for carrying out the surrender.

The Japanese Cabinet was reported to have resigned.

In all sectors of the Manchurian front the Russian advance continued.

Japanese aircraft approached the Allied Third Fleet about one hundred miles off the Japanese coast. Sixteen of the enemy were shot down.

16th August.—In Manchuria Japanese counter-attacks were made. The Russians occupied the town of Wangching and, in co-operation with the Amur river flotilla, secured Kiamusse.

The Japanese Emperor's order to surrender was sent to all Japanese forces.

General MacArthur extended the time limit under which the Japanese surrender envoys were to reach Manila.

The Soviet-Polish frontiers were settled by a treaty signed by the two Governments.

17th August.—Four U.S. bombers on photographic reconnaissance over Tokyo Bay were attacked by ten Japanese fighters and by anti-aircraft fire. Two fighters were destroyed; one bomber was damaged.

In Manchuria Marshal Vassilevsky sent the Japanese Kwantung Army a summons to surrender by noon of 20th August.

The Japanese Government appealed to General MacArthur to secure the immediate cessation of the Russian offensive.

The French Government ratified the United Nations (San Francisco) Charter.

General de Gaulle, in accordance with the recommendation of the High Court of Justice, commuted the death sentence on Pétain to detention for life.

18th August.—Two U.S. photographic reconnaissance aircraft were attacked over Tokyo by fourteen Japanese fighters. Two of the latter were shot down; both the American aircraft were badly damaged.

In Manchuria the Japanese showed an increasing tendency to surrender.

19th August.—The Japanese envoys, including the Emperor's personal representative, arrived at Manila to receive General MacArthur's instructions.

All Japanese forces in Bougainville (Solomon Islands) ceased hostilities.

In Manchuria on most sectors of the front the Japanese ceased resistance. Nearly 100,000 surrendered on this day. Soviet airborne troops which landed in Harbin, Mukden, Kirin, Chanchun and Tientsin found the enemy ready to capitulate.

20th August.—Lord Louis Mountbatten, South-East Asia Command, broadcast instructions to Count Terauchi, commanding the Japanese Southern Army. The latter was ordered to send a representative to Admiral Mountbatten's Chief of Staff at Rangoon on 23rd August.

Chungking reported that Chinese forces had occupied many towns in the province of Shansi; also the arrival in Chihkiang of Japanese envoys to arrange the capitulation of the Japanese forces in China.

In Manchuria the Russians occupied Mukden and Harbin. Enemy resistance ceased in the southern part of Sakhalin.

Negotiations began for the surrender of the Japanese forces in New Guinea.

The Supreme Soviet of the U.S.S.R. ratified the United Nations Charter.

21st August.—It was formally announced that President Truman had given orders to cancel all outstanding Lend-Lease engagements.

22nd August.—Russian airborne troops landed in Dairen and Port Arthur and began to disarm the garrisons. Troops were landed also on the island of Shumushu (northernmost of the Kuriles).

23rd August.—The Russians occupied the island of Paramushire (Kuriles).

The British Parliament ratified the United Nations Charter.

24th August.—The Japanese in New Guinea ordered the cease fire.

The U.S. Navy Department assumed the loss of the submarine "Bullhead."

China ratified the United Nations Charter.

25th August.—The British 21st Army Group in Germany became the British Army of the Rhine (B.A.O.R.).

27th August.—The British Pacific Fleet under the command of Admiral Sir Bruce Fraser anchored in Japanese home waters (Sagami Bay).

28th August.—The first U.S. troops landed in Japan, being airborne to Atsugi airfield, eighteen miles from Tokyo. Nine U.S. warships, carrying British and American naval personnel for the first stage of the occupation, entered Tokyo Bay.

Preliminary surrender arrangements as regards South-East Asia were settled with Japanese envoys at Rangoon.

British naval forces arrived off Penang and Sabang.

Russian troops completed the occupation of the southern half of Sakhalin island.

29th August.—The main landing of Allied troops began in the Tokyo area of Japan.

The first list, containing twenty-four names, of war criminals to be tried by the Allied Military Tribunal was published. Göring headed the list.

30th August.—Sailors and marines representative of Great Britain, New Zealand, Australia and South Africa landed and began the demilitarization of two naval establishments in Tokyo Bay. U.S. forces proceeded with the occupation of the main Yokosuka naval base.

General MacArthur landed in Japan at Atsugi aerodrome and established his headquarters in Yokohama.

A strong British naval force entered the port of Hong Kong.

1st August.—It was officially announced that British naval forces had taken over Hong Kong dockyard. Three Japanese "suicide" boats had attempted to leave and were attacked by British carrier-borne aircraft which sank one, drove one ashore, and compelled the third to return. Snipers in the dockyard area had been dealt with.

Field Marshal von Brauchitsch and Field Marshal Manstein were arrested by the British authorities in Schleswig-Holstein.

1st September.—The Japanese reported that they had completed the evacuation of five agreed areas of Singapore city, leaving them free for the British forces of occupation.

The Chinese announced that their troops had entered Canton and that a military delegation had reached Hankow. Chinese airborne troops were reported to have arrived at Shanghai.

Russian troops completed the occupation of the Kurile islands.

The Four Power (Great Britain, France, U.S.S.R., and U.S.A.) Conference in Paris gave Spain a month in which to remove her troops and restore the International Zone of Tangier.

Brazil ratified the United Nations Charter.

2nd September.—**The Japanese envoys signed the instrument of surrender** on board the U.S. battleship "Missouri" in Tokyo Bay. American troops landed in the bay ready to march on Tokyo.

A Siamese military mission arrived in Ceylon to arrange with South-East Asia Command for the evacuation of the Allied prisoners of war and the surrender of the Japanese troops in Siam.

The surrender of the Japanese forces in the Philippines and of the Japanese garrison of Truk was completed.

In Vienna Russian troops were withdrawn from the British, American and French zones of occupation.

3rd September.—The British East Indies Fleet arrived off Singapore.

The disarming of the Japanese troops on Bougainville (Solomons) was reported to have been completed.

4th September.—It was announced in Chungking that the movement of Chinese forces into Nanking had begun.

Wake island was surrendered by the Japanese to U.S. forces.

5th September.—**British, Indian and Gurkha troops landed at Singapore.**

In a round-up of Ruhr industrial magnates by the British authorities Hugo Stinnes was arrested.

6th September.—The surrender of the Japanese forces in the South-West Pacific was signed in H.M. carrier "Glory" near Rabaul.

7th September.—The Australian House of Representatives ratified the United Nations Charter.

8th September.—**The first U.S. troops entered Tokyo.** Other U.S. forces landed in Korea.

The complete surrender of all Japanese forces in Bougainville and adjacent islands was signed at Torokina, northern New Guinea.

9th September.—The formal surrender of 1,000,000 Japanese troops was signed in Nanking.

General MacArthur entered Tokyo.

10th September.—In Oslo Quisling was sentenced to death.

General MacArthur ordered the dissolution of the Japanese Imperial Headquarters and established a Press and Wireless censorship of Japan.

The surrender of Borneo was made on Labuan.

11th September.—The surrender of Timor was signed on H.M.A.S. "Moresby" at Koepang.

In Rangoon the instrument of surrender of the Japanese "Southern Armies" was signed.

13th September.—The formal surrender of the Japanese forces in New Guinea was signed at Wewak.

14th September.—At Kuala Lumpur the formal surrender of the Japanese forces in Malaya was signed.

16th September.—The formal surrender of the Japanese at Hong Kong was signed.

In the middle of August came the great event, the surrender of Japan and the end of the Second World War. The collapse of the aggressor in the Far East, far sooner than many anticipated, was not to be attributed solely or mainly to the employment of the atomic bomb (see 6th and 9th August). Superior Allied sea and air power, used with ever-increasing strength and efficiency, had begun to paralyse the whole Japanese war effort. Japan had previously asked the U.S.S.R. in vain to mediate for peace; and it should be remembered that the Russian entry into the Pacific war had already been planned to take place three months after the defeat of Germany. Obviously all was in readiness on land and sea and in the air for the Russian invasion of Manchuria on 9th August.

Of the arduous and costly combined operations necessary to secure air bases within easy striking distance of the Japanese homeland, Okinawa was the crowning American achievement. Concurrently U.S. forces had reconquered the Philippines. And in the course of the struggle the Japanese navy was practically annihilated. American naval authorities computed the enemy's losses at 12 battleships, 15 carriers, 4 escort carriers, 15 heavy cruisers, one old cruiser, 20 light cruisers, 126 destroyers and 125 submarines. The Japanese losses in merchant tonnage, if not quite so severe, were crippling.

Since 24th November, 1944, Super-Fortresses had made 285,000 sorties in 318 attacks upon Japan. The total of bombs dropped exceeded 159,000 tons. Half of Tokyo's 60 square miles was reckoned to have been burnt out, and 40 per cent. destroyed of each city attacked with incendiaries. The two atomic bombs are estimated to have caused a total of 280,000 casualties, and the total Japanese casualties from bombing raids on the homeland were stated to be 260,000 killed and 420,000 injured.

Following President Truman's announcement (see 6th August), a statement by Mr. Winston Churchill was issued from Downing Street. This made known that research on the atomic bomb—the release of energy by atomic fission—had been

started in Great Britain in 1939 and brought to fruition by the combined work of British and United States scientists. The Canadian Government had also co-operated, the necessary plant for production being established in the U.S.A. German efforts to achieve the same end were outpaced, partly through air and commando raids on enemy installations.

The details of the effects of the atomic bombs as reported by the Japanese required much further investigation; but the release and control of atomic energy had produced a new weapon of war perhaps too destructive for ordinary military purposes, since universal destruction is scarcely the aim of military operations.

In the war against Japan the British Empire employed 300,000 troops. When the enemy surrendered, large-scale operations against Siam and Malaya were almost ready to be launched. Five divisions—one British, one British-Indian, one Australian, one Canadian and one New Zealand—were to have taken part in the actual invasion of Japan. Over 60 per cent. of the strength of the Royal Navy was in the Far East.

Speaking in London on 9th August, Lord Louis Mountbatten said that 85 per cent. of Burma had been recovered. Our East Indies Fleet had rendered notable service, but, as the essential landing craft were diverted to the European theatre, the reconquest had had to be carried out from the North, depending on air supply. (From the Battle of Imphal to the fall of Rangoon the R.A.F. flew nearly 250,000 sorties, carried 80,000 troops, and delivered 170,000 tons of supplies.) In the whole campaign 128,000 Japanese dead had been counted; our casualties were 20,000.

In the reply to Japan of the Four Powers (see 11th August) it was made clear that Japan would be occupied by Allied forces and that prompt provision must be made for the safety and disposal of all prisoners of war and civilian internees so that they might be placed quickly upon Allied transports. The ultimate form of government of Japan would be in accordance with the will of the Japanese people. Soon after negotiations began, and almost before all fighting had ceased, medical and welfare units were flown to the principal internment camps throughout the Japanese-occupied territories.

As far as could be seen, in the re-settlement of the Far East and Pacific, Great Britain, France and Holland would recover their former possessions. The U.S.A. would resume its position in the Philippines, and probably annex the chain of island air bases captured during the War. Russia had already secured China's recognition of the independence of Outer Mongolia and, although Manchuria returns to China, Russia would acquire Port Arthur, whilst Dairen (the former Dalny) becomes a "free port." The southern half of Sakhalin also goes to Russia. China recovers the island of Formosa. With the expulsion of the Japanese from all the territories they overran, Japan herself, still a potential danger and possessed of a teeming population, becomes a political and economic problem of considerable complexity.

With regard to Germany, the Three Power Conference (see 2nd August) in Berlin settled details of the control of the country, reparations, and the new frontiers. Generally the settlement gives East Prussia to the Poles and Russians, the latter to have Königsberg, whilst the Polish frontier is advanced to the Oder-Neisse line. France and China were invited to join a Council of Foreign Ministers which would draw up peace treaties for Italy and, where possible, for the "ex-satellite" countries. It was decided that Governments which had remained neutral during the War might, if they so wished, join the United Nations organization, but that Spain under the Franco *régime* could not be admitted.



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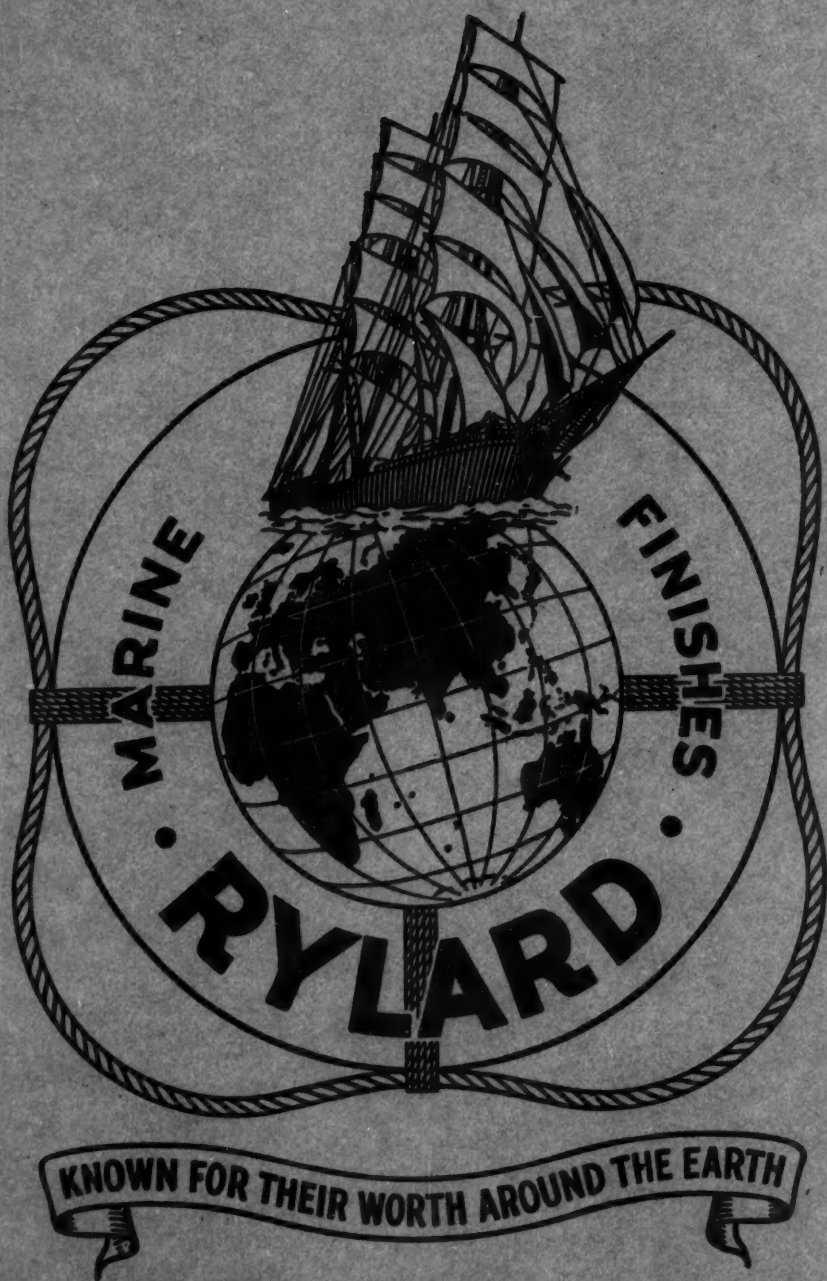
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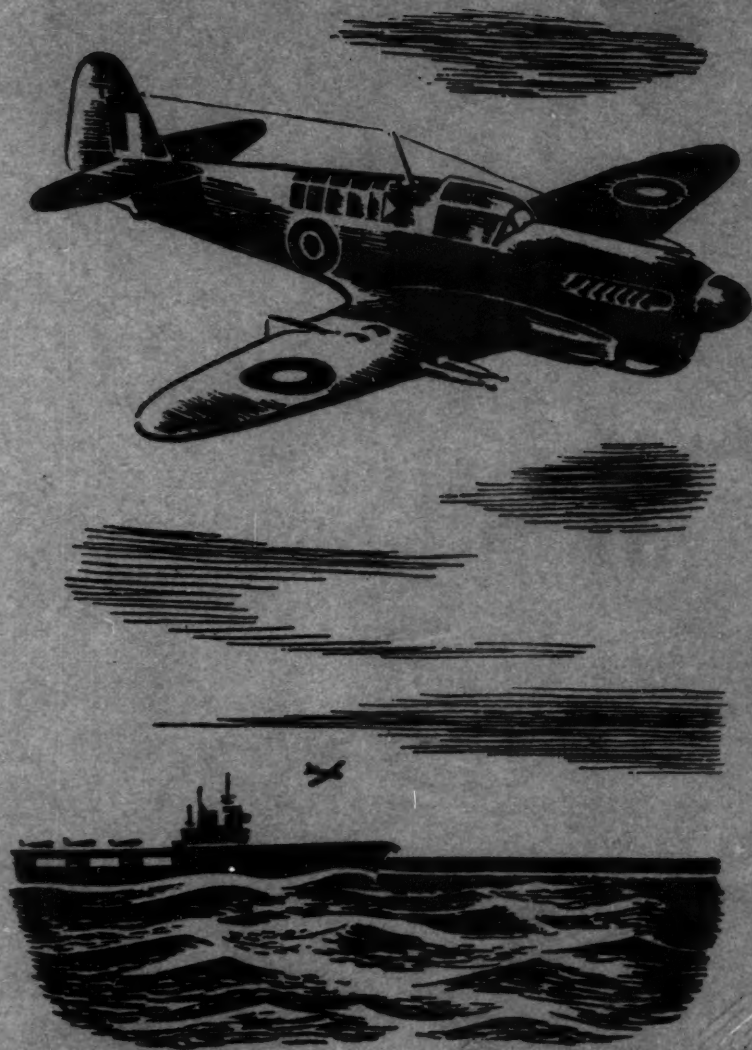
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